التحقق من تأثير استخدام استراتيجيات التعلم بمساعدة الكمبيوتر على مهارات التحدث والكتابة لمتعلمي اللغة الإنكليزية كلغة ثانية

Investigating the Impact of Utilizing Computer-assisted Learning Strategies on Speaking and Writing Skills of ESL Learners

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الكلمات المفتاحية: استراتيجيات التعلم بمساعدة الحاسوب ، التحدث ، الكتابة ، متعلمي اللغة الإنكليزية كلغة ثانية.

Keywords: Computer-assisted Learning Strategies, Speaking, Writing, ESL Learners.

الملخص

في مواجهة الصعوبات الهائلة والسريعة التي تولدها تكنولوجيا المعلومات والاتصالات ، يجب على النظام التعليمي مواكبة الاكتشافات العلمية الصاعدة والتقدمية ليكون متسقًا مع الحياة العصرية والتحول في منظور المعلم والمتعلم في العصر الرقمي. في ضوء ما سبق ،يرغب الباحث في التقصي عن تأثير استراتيجيات التعلم بمساعدة الحاسوب على مهارات التحدث والكتابة لمتعلمي اللغة الإنكليزية كلغة ثانية. من أجل تحقيق هدف البحث تم إرسال استبيان عبر الإنترنت لعينة من (١٥٠) أستاذا جامعيا للغة الانكليزية من مختلف أقسام اللغة الإنكليزية في جامعات كردستان / أربيل باستخدام تقنية البحث الكمي. ونظرًا لأن استراتيجيات التعلم بمساعدة الكمبيوتر تفيد العديد من منهجيات وموارد التعلم المعاصرة ، فقد كشفت نتائج الدراسة عن أهمية توظيفها أثناء تدريس مستويات أعلى في اللغة الإنكليزية. فهي تحفز الطلاب على التواصل والتفاعل مع بعضهم البعض ، وتزيد من دافعهم للتعلم ، وتشجعهم على التفاعل والمشاركة أثناء توظيفها عند استخدام اللغة. كما شددت نتائج الدراسة على أهمية استخدام استراتيجيات التعلم بمساعدة الكمبيوتر في تعزيز مهارات التحدث والكتابة لدى الطلاب من حيث النطق الصحيح ، وتحسين فهم المفردات وإنتاجها ، وتحسين الكتابة الصحيحة ، وتقليل الأخطاء الإملائية ، والمساعدة في إتقان الكتابة بعلامات التنقيط والقواعد السليمة وتمكينهم من استخدام بناء قواعدي واضح ومنطقي داخل النص وعند المحادثة.

أخيرًا ، أسفرت الدراسة عن اكتشاف أن منهجيات التعلم بمساعدة الكمبيوتر كان لها تأثير مفيد ذو مغزى إحصائيً على قدرات الكتابة والتحدث لمتعلمي اللغة الإنكليزية كلغة ثانية في كردستان عند مستوى معنوي قدره (٠.٠٥). اقترحت الدراسة استخدام تقنيات التعلم بمساعدة الكمبيوتر ، مثل استخدام البرامج التعليمية ، في تدريس اللغة الإنكليزية

Abstract

In the face of the vast difficulties that information and communication technology is fast generating, the educational system must keep up with the rising and progressive scientific discoveries to be consistent with modern living and the shift in teacher and learner perspective in the digital age. In light of the above, the researcher has a desire to investigate the effect of computer-assisted learning strategies on the speaking and writing skills of learners of English as a secondary language. An online survey was sent to a sample of (150) college English instructors from different English department sectors in Kurdistan/Erbil universities using a quantitative technique. Because computer-assisted learning strategies make use of several contemporary learning methodologies and resources, the analysis of the replies revealed the significance of employing them while teaching higher English levels. It motivates students to communicate and interact with each other, increases their motivation towards learning, and encourages them to interact and participate while employing them. It also stressed the importance of using computer-assisted learning strategies in enhancing students' speaking and writing skills in terms of proper pronunciation, improving vocabulary understanding and production, improving correct writing, reducing spelling errors, helping master writing with punctuation marks and sound grammar and enabling them to use a clear and logical structure within the text and speech. Finally, the study resulted in the finding that computer-assisted learning methodologies had a statistically meaningful beneficial influence on the writing and speaking abilities of ESL learners in Kurdistan at a significant level of (0.05). The study suggested using computer-assisted learning techniques, such as the use of educational software, in the teaching of English.

1. Introduction

Mart learning, which is based on an integrated methodology that uses current technology to affect a good shift in conventional learning ways, is now possible because of technological breakthroughs (Palpanathan, 2017). This also allowed the creation of an inspiring educational environment for the advancement of creativity and innovation skills, the advancement of intellectual life, and efficient communication between educational process elements, allowing them to fully implement within the digital world characterized by impressive advancement and prosperity of countries (Davood, 2017).

Palpanathan (2017) asserted that because of the advent of computer-assisted learning and educational software, which are leaders in all sectors of technology, this is the case. Due to the wide variety of learning strategies and simplicity of use, as well as the emergence of a stimulating environment for learning and achievement, and the development of multiple intelligences in the learner, educational technology is considered one of the technological innovations that support the development of language skills among learners (ibid).

Dyah (2019) states that the number of teachers using computers and the Internet in their classrooms has increased dramatically over the last few years.

In the CALL method of language teaching and learning, computer t echnology is used to facilitate the presentation, reinforcement, and assess ment of the information to be learnt, with a focus on interaction.

The "search for and study of computer applications in English language teaching and learning" is another definition of CALL.

Noticeable errors can be observed in the descriptive writings in the English language that students make, as they use the same terms and sentence structures in all their writings, in addition to the similarity of errors among them (Abbas, 2013). Therefore, the researcher identified difficulties in expressing and developing ideas, whether through writing or conversation. In light of this, the researcher took the initiative to investigate the effect of using computer-assisted learning strategies on the speaking and writing skills of learners of English as a secondary language (Dyah, 2019).

1.1 The Problem

Many students do not seem to improve their writing skills despite being studied descriptive writing every year. They tend to employ identical vocabulary, substance, and sentence structure, as well as make comparable grammatical mistakes. We discovered that students struggle with presenting and brainstorming ideas, as well as cohesion, throughout writing lessons.

Due to a restricted vocabulary, students frequently commit errors in phrasing, misspell some terms, create grammatical mistakes (poor sentence construction), and overlook punctuation and many others. Students spend much time writing essays outside of the classroom because they struggle to explore and develop ideas, negotiate what to say with other students, and finally lose interest as the class is becoming too boring.

Thus, this underlines the need to rethink English language curricula for elementary grades to encourage English language teachers to employ modern teaching methods, as well as stay up with the usage of current learning strategies based on technological tools.

It is worth noting that the presence of errors in writing as one of the outcomes of learning the English language confirms the existence of a defect in speaking as it is one of the outcomes of the English language. As a result, in the light of the need and lack of the Arab library in general for a study similar to current research, the researcher aimed to answer the main question of the research problem:

"What is the effect of computer-assisted learning strategies on the speaking and writing skills of learners of English as a secondary language?"

Accordingly, these sub-questions are involved, which the research came to cover**:**

1. How do computer-assisted learning techniques affect the speaking and writing abilities of ESL students?
2. . What conditions must computer-assist learning techniques meet?
3. 3. How can students studying English as a second language use computers to improve their writing and speaking abilities?

1.2 Aims of the Study

This study intends to show how computer-assisted learning techniques affect secondary English language learners' speaking and writing abilities.

The research's primary goals are to: Examine the effects of computer-assisted learning techniques on ESL students' writing and speaking abilities; Examine the need for computer-assisted learning strategies.
Look at computer-based teaching methods for English language learners who are studying it as a second language.

1.4 Limits of the study

The limitations of this research were confined to the following:

Time limit: The current research approach will be conducted during the academic year (2021-2022).

Place limit: The current research approach will be carried out in Kurdistan / Erbil.

Human Limit: The current study will be undertaken on 150 college teachers in English departments at Kurdistan Universities.

2. Literature Review

The next two sections of our research provide further information regarding the subject of our present study: 1. The effect of employing computer-assisted learning methodologies on speaking and writing abilities, and 2. The criteria for computer-based learning techniques, 3. Computer usage techniques for ESL learners who are learning to write and speak.

2.1 The impact of using computer-assisted learning strategies on speaking and writing skills

It is vital to acquire languages in general, and English in particular, to benefit from the technological age in which we live. Language is a benchmark that reveals the progress of nations and peoples because it represents their way of thinking, their system of expression, and the communication between individuals and groups (Abbas, 2013).

According to Al-Janaida (2017), in public and higher education systems, the English language consistently ranks top in the interchange of science, technology, media, and the Internet, and this is not just true for foreign nations. In Kurdish nations, the usage of the English language has significantly risen across a variety of sectors, to the point that it is now seen as essential for communication and learning across all subject areas. (Dyah, 2019).

Making electronic software available to learners over the Internet was one of the most popular modern teaching strategies.

Furthermore, the effectiveness of electronic software in the educati onal process and how it might motivate students to interact study, and res earch information.

Of these studies is Al-Ghamdi's study (2011), which mandates that educational software be designed following educational, technical, and technical standards to fit the target audience and achieve educational goals consistent with its scientific content, in a way that enhances the educational environment and develops the learner's essential competencies and skills (Abdel Wahab 2017).

The use of electronic educational software in the educational proce ss, in particular, was advocated at numerous international and local educa tional conferences, which emphasized the effectiveness of the software in learning and its impact on the educational process while urgin

g curricula computerization to support scientific and technological advanc ement (Davood, 2017).

Technology has grown ingrained in today's environment, and this is also true in the field of English language instruction (Khatereh Khoshnoud, 2015). Its application in English language teaching and learning has dominated discussions, motivating students and instructors to search for benefits from their use of new technology in a way that delivers engaging, entertaining, and dynamic results (ibid). Being able to write in English with the use of contemporary computer tools has been essential for teaching English, especially since CALL was incorporated into the curriculum for teaching English as a second language (Dyah, 2019).

It is envisaged that English language E-learning labs would be equipped with the most modern hardware and software, as well as internet connectivity. The teacher may control and exhibit what he wants to teach via assessment, dictionaries, and sending and receiving from and to lab students. According to various studies, CALL seems to be an innovative and successful option for language educators (AL-Harbi, A. A., 2016).

Moreover, CALL would enable the students to advance at their own pace and work independently to solve learning challenges, offer quick feedback, let learners know if their responses are correct or not, and correct them if they are incorrect (ibid). English writing, without a mistake, performs critical international and transnational functions in business and government across the globe. The essence of education and the path of language learning has been described as writing (Palpanathan, 2017).

Teachers and CALL researchers recently discovered that CALL provides technology that supports all levels of schooling. In reality, numerous scholars have discovered that in the last two decades, computer-assisted instruction (CAI) has become one of the features that distinguish writing and speaking courses (Alsubaie, M., 2017).

Indeed, the advantages of CALL are numerous, as personalization of information, and the provision of challenging and intriguing training exercises can all improve learners' motivation for the use of animated things on screen (ibid). Furthermore, being able to set our own pace and make decisions about what and how we learn will make students feel more confident in their abilities to learn. CALL can help to learn better critical thinking skills, as well as self-concept, grasp basic skills, and enhance written and oral communication, all of which can lead to higher-level thinking skills and greater memory (Al-Harbi A.A, 2016). Computers enable pupils to grow at their speed and find solutions independently. One of the CALL implicational strategies that improve writing is computer-assisted writing (CAW) (Khatereh Khoshnoud, 2015).

2.2 The Computer-assisted Learning Strategies Requirement

The process of developing computer-assisted learning strategies necessitates the involvement of a team of specialists who must be familiar with certain standards. In addition to professionals in education, psychology, software, and hardware, the group consists of designers with skills in still and motion image processing programs, as well as teachers who examine the curriculum to be transformed into computerised (Hassan, 2012).

Al-Baroudi (2015) pointed to common requirements for building e-learning software, stating that the study's purpose should be obvious, stated, and measurable, considering the student's qualities (in terms of age and educational stage). This style of learning should be participatory, with a constant and suitable assessment of the learner's behaviours.

Shalaby, Al-Masry, Asaad, and Al-Desouki (2018) improved the intelligibility of the title and the guidelines that the student must follow when using computerized English language classes. Additionally, the aspect of suspense and engaging the student when learning English language skills (such as writing and speaking) is critical, because learning the language is one of the skills that must be practiced and trained.

Al-Hela (2017) also stressed the importance of logical and psychological simplicity of directions and topic patterns, as well as the flexibility of adopting computer-aided learning methodologies. One of the factors that must be considered while developing any computer-assisted learning method in general, and learning English language skills (writing and speaking) in particular, is having enough flexibility between them and the learner (Davood, 2017).

2.3 The Strategies for Utilizing Computer-assisted Learning on Speaking and Writing skills of ESL Learners

The advancement of information and communication technology, as well as the increased usage of computers and the widening of its applications in many disciplines, including education (Dyah, 2019). As a result, it has resulted in diversity and a multitude of teaching methodologies, the majority of which are based on instructional software. What are the tactics for using a computer to improve one's English language skills?

According to (Hela, 2017) the main strategies are described as follows:

2.3 1 Private Education Strategy

The computer's design is based on the educational process, where knowledge is presented and essential skills are explained before the learner is guided and directed. As well, the engagement between the student and the computer happens through questions that emerge on the computer display, and the computer, therefore, serves as a private instructor for the student.

2.3. 2 Training Strategy and Practice

The computer assumes that the student has mastered specific concepts and knowledge before using its programs, and the computer is predicated on presenting a series of questions to improve student performance. As a result, work must be done to ensure that the exercises progress in terms of difficulty, allowing the learner to locate possibilities.

2.3.3 Simulation Strategy

It necessitates that the student assesses and performs the procedure before applying and implementing a basic understanding in the situation of a tough and complex situation. Simulation is described as a learning program that is not included in the student's classroom situations, where simulation attempts to provide actual choices to experiences that cannot be provided due to a large financial cost and a long time commitment.

2.3.4 Dialogue Strategy

To teach a certain subject, this technique focuses on direct communication between the learner and the computer. The computer asks queries that respond quickly, and then it assesses these responses and compares them to the knowledge and data previously stored.

2.3.5 Educational Games Strategy

These strategies are considered logical games with an element of suspense and amusement that are built on igniting the student's motivation. Where academic accomplishment and enjoyment intersect to create sufficient enthusiasm to entice the learner to learn.

3. Methodology

In this section of the research, the researcher describes the method and processes that will be used to attain the study purpose by providing each of the study population, sample, and instruments, and the following is a summary of that.

3.1 Research Design and Tool

In this study, the goal of the research is to understand how computer-assisted learning techniques affect ESL students' writing and speaking abilities. The quantitative strategy is thought to be the one that will address the study topic most thoroughly. This method simply combines data, analyzes it, and then uses it to look at the relationship between variables (Rawbone, 2015). The main objective of this method is to define the possible association between two or more variables (Leedy & Ormrod, 2005), as is the case in this research which is aiming to find the relation between computer-assisted learning strategies and English writing and speaking skills.

The questionnaire was the instrument utilized in this study for the collection of primary data through conducting a cross-sectional survey.

Owens (2002) pointed to the advantages of the survey such as its consistency, as the data gathered is not available from other sources, the unbiased representation of the population of interest and the standardization of the measurement, since the same data is collected from every participant. The questionnaire, which was divided into two sections with a collection of closed statements aimed at gathering information on the various research variables, was created based on prior relevant studies and literature.

The first section of the questionnaire asks questions on the sociodemographic characteristics of the study's chosen sample of instructors, such as their gender, age, educational background, and years of experience. The second half is divided into three questions, the first of which asks about the independent variable in this study—the computer-assisted learning tactics—and the other two ask about the effects of these strategies on ESL learners' writing and speaking abilities.

Moreover, the first dependent variable is English speaking ability, which is the subject of the second section's six closed-ended questions. The third portion concludes with a set of (6) statements that probe the second dependent variable, English writing proficiency. The study sample's responses were gathered using the fifth Likert Scale.

The study tool's validity and dependability must be confirmed, nevertheless. As long as the questionnaire's claims were from those published in trustworthy, peer-reviewed prior research and journals, its validity was accomplished. However, completing pilot research on a sample of (30) English college instructors from various departments and sectors at the Kurdistan/Erbil Universities, the questionnaire's validity was confirmed. Before distributing the tool to the initial research sample participants and starting the actual study, the instrument's reliability and that of its constituent parts were assessed using SPSS' Alpha Cronbach test. The Cronbach alpha values for the entire questionnaire and each of its component pieces are displayed in Table 1.

Table 1: The results of Cronbach's alpha reliability test

No.	Variable	Number of Items	Cronbach's alpha value
1	Computer-assisted learning strategies	6	0.831
2	English speaking skills	6	0.805
3	English writing skills	6	0.876
Overall Tool's Items		18	0.863

As can be seen in Table 1, Cronbach's alpha was calculated to be (0.831) for the first scale's components, (0.805) for the second scale's components, and (0.876) for the third scale's components. Additionally, it was (0.863) for all of the instrument's components, indicating adequate tool

reliability and results that would hold even if the questionnaire were given to a different random sample. This is the case as long as Cronbach's Alpha is greater than (0.7) (Graham, 2006).

3.2 Research Sample

All English college teachers from different departments and industries at the Kurdistan/Erbil Universities made up the study population in the current study. This group was chosen because they have extensive expertise teaching English and are most closely tied to determining how computer-assisted learning practices affect ESL students' writing and speaking abilities.

Because it would be too expensive and time-consuming to survey the entire study population, a random representative sample of (150) English college instructors from different departments and sectors at the Kurdistan/Erbil Universities was chosen, and the questionnaire was sent to them electronically via email. The academic year was used to perform this study. (2021-2022).

Table 2 shows the socio-demographic composition of the study sample's participants by gender, age, education al background, and years of experience:

Table 2 shows the research sample's socio-demographic characteristics.

Variable	Categories	Frequency	Percentages
Gender	Male	85	56.7%
	Female	65	43.3%
Age	20-30 years	23	15.3%
	31-40 years	83	55.3%
	41-50 years	33	22.0%
	More than 50 years	11	7.3%
Qualifications	Bachelor’s degree	85	56.7%
	Master’s degree	39	26.0%
	PhD	26	17.3%
Years of Experience	Less than 3 years	10	6.7%
	3 years - 10 years	31	20.7%
	10 years - 20 years	50	33.3%
	More than 20 years	59	39.3%
Overall		**150**	**100%**

The study participants were split almost evenly between males (56.7%) and girls (43.3%), according to the descriptive statistics of the socio-demographic data of the study sample. According to Table 2 above, the age group with the highest participation rate in this survey was teachers between the ages of 31 and 40, with a percentage of (55.3%), followed by teachers between the ages of 41 and 50 (22%) and teachers between the ages of 20 and 30 (15.3%), and teachers older than 50 (7.3%). The majority of the study sample's participants were well-educated, with at least a bachelor's degree (56.7%), a master's degree (26%) or a doctoral degree (17.3%) among them.

Table 2's years of experience column reveals that there are few teachers with fewer than three years of experience, accounting for just (6.7%) of the sample. Contrarily, the majority of the study sample (93.3%) had more than 3 years of experience, including (20.7%) those with 3–10 years, (33.3%) with 10–20 years, and (39.3%) those with more than 20 years. This suggests that the study sample is made up of highly competent instructors who are familiar with the subject matter, and it demonstrates their capacity to provide credible and highly effective responses to the research questions.

The researcher used the SPSS (23) program to analyze the majority of the data gathered from the surveys, present the findings, and draw conclusions. To summarize the relevant variables, several statistical descriptive tests, such as frequencies, percentages, means, and standard deviations, were run. The primary issue with this study is that it did not assess the effect of computer-assisted learning methodologies on the writing and speaking abilities of ESL learners at a significance level of 5%. Instead, it employed simple linear regression and Pearson correlation tests.

4. Results and Discussion

This section analyzes data from questionnaires filled by a sample of English college teachers from various departments and sectors at Kurdistan/Erbil Universities. The Pearson correlation and simple linear regression tests were used to determine the relationship between the use of computer-assisted learning strategies and the relationship between the two variables, and means and standard deviations were used to determine the level and rankings of the study's items.

4.1 Results related to Computer-Assisted Learning Strategies

The descriptive statistics (means and standard deviation) of the responses and their ranks, which were elicited using a five-point Likert scale, were calculated via SPSS to determine the extent of using computer-assisted learning strategies and their most salient benefits from the perspective of English language teachers in Kurdistan/Erbil. Means ranging from (1-1.80) were considered very low, from (1.81 to 2.60) were considered low, and from (2.61-3.40) were considered The responses to the questionnaire's items used to assess the effectiveness of computer-assisted learning methodologies are summarized in Table 3 below.

Table 2: Summary of participants' responses to items measuring the utilization of computer-assisted learning strategies (N=150)

Statement		Mean	Std. Deviation	Rank	Level
1. Computer-assisted learning strategies are a creative and		٤,١٢	0.91	1	High

effective alternative for English language teachers.					
2. Computer-assisted learning techniques include examinations, dictionaries, and the ability to send and receive messages to and from lab trainees, allowing the instructor to control and illustrate what he intends to accomplish in his instructions.		٣,٩1	١,١٠	5	High
3. Computer-assisted learning methodologies allow learners to develop at their speed and solve learning difficulties on their own.		٣,٩3	١,٠١	4	High
4. Computer-assisted learning methodologies enable teachers to offer rapid feedback, inform students if their responses are accurate or incorrect, and supply the proper solution if they are incorrect.		٤,٠١	0.96	3	High
5. Computer-assisted learning tactics boost student motivation by personalizing information, moving items on the screen, and giving practice tasks that incorporate challenge and interest.		٤,٠٤	0.94	2	High
6. Computer-assisted learning methodologies help students enhance their four language skills (writing, reading, listening, and speaking) as well as their critical thinking abilities.		٣,٨٥	0.97	6	High
Overall		**٣,٩8**	**0.96**	**High**	

The benefits of employing computer-assisted learning methodologies in teaching English from the perspective of English instructors in Kurdistan/Erbil were substantial, as shown in Table 3 above, and ranged from (3.85- 4.12). The highest agreed-to mean statement was found in item (1), which said that "Computer-assisted learning strategies is a creative and effective alternative for English language teachers" (4.12). Item (5), which said that "Computer-assisted learning strategies enhance learners' motivation by personalizing information, placing moving objects on screen, and providing practice activities that include challenge and curiosity," came in second with a score of 5.0. (4.04), with a mean of 4.01, item (4) came in third, with the statement that "Computer-assisted learning strategies enable teachers to provide immediate feedback, let learners know if their answers are correct or not, and provide them with the correct answer

if they are wrong," and item (6) came in last, with the statement that "Computer-assisted learning strategies improve the four language skills (writing, reading, listening, and speaking) and critical thinking" (3.85).

Furthermore, the overall mean for this section was high with a value of (3.98) which indicates that most of the study samples agree largely on the importance of using computer-assisted learning strategies in teaching English for advanced stages because it employs multiple modern learning techniques and sources. It motivates students to communicate and interact with each other, increases their motivation towards learning, and encourages them to interact and participate while employing them, which contributes to the development of English language skills. The results of this study are in agreement with (Al-Janaida, 2017; Abbas, 2013; Palpanathan, 2017; Davood, 2017) studies, which indicated the suitability of designing computer-assisted learning strategies with the characteristics of students, and the clarity of the procedural steps involved in them. Those strategies raised their motivation and enthusiasm for learning, made them always active and alert to what they learned, worked to develop the spirit of independence and self-reliance, and supported the learning of the four English language skills (reading, listening, speaking and writing).

4.2 Results related to English-Speaking Skills

To determine aspects of improved English speaking skills from the perspective of English language teachers in Kurdistan/ Erbil, a series of questions were posed, and in the same way, the respondents' responses were arranged using a Likert scale with a maximum of five points. Table 4 displays the findings of the descriptive analysis:

Table 3: Summary of participants' responses to questions assessing different facets of enhanced English speaking abilities (N=150)

Statement	Mean	Std. Deviation	Rank	Level

1. Computer-assisted learning strategies contribute to improving students' pronunciation so that ESL learners' pronunciation is similar to that of a native speaker.	3.99	1.03	4	High
2. Computer-assisted learning strategies contribute to improving vocabulary understanding and production that enhance the level of conversation.	4.15	0.83	1	High
3. Computer-assisted learning strategies contribute to improving the accuracy of the conversation in terms of selecting the correct grammatical structures.	3.96	0.98	6	High
4. Computer-assisted learning strategies increase students' ability to communicate and creatively use the language they know.	4.08	0.95	3	High
5. Computer-assisted learning strategies increase students' interaction and ability to cooperate with native speakers of the language.	3.97	0.96	5	High
6. It increases students' fluency and reduces pauses and gaps in student speech.	4.12	0.89	2	High
Overall	**4.04**	**0.92**	**High**	

From the perspective of English instructors in Kurdistan/ Erbil, it is evident from Table 4 that the arithmetic means that assess the features of increased English speaking skills were high, ranging from (3.96- 4.15). It is clear that item (2), which stated: "Computer-assisted learning strategies contribute to improving vocabulary understanding and producing that improves the level of conversation," has the highest agreed-upon mean statement (4.15), followed by item (6), which stated: "It increases students' fluency and reduces pauses and gaps in student speech," with a mean score of 3.96. (4.12), With a mean of 4.08, item (4) came in third, and its statement that "Computer-assisted learning strategies increase students' ability to communicate and creatively use the language they know" came in fourth. Item (3) had the lowest mean value and it stated that "Computer-assisted learning strategies contribute to improving the accuracy of the conversation in terms of selecting the correct grammatical structures" (3.96).

Furthermore, the overall mean for this section was (4.04), which indicates that most of the study sample members largely agree on the

importance of using computer-assisted learning strategies in enhancing students' speaking skills in terms of proper pronunciation, improving vocabulary understanding and production, which enhances the level of students' speaking skills. These results are consistent with the study (El-Ghonaimy, 2015; Naba'h et al., 2009) which showed that computer-assisted learning strategies contribute to improving the accuracy of conversation in terms of choosing the correct grammatical structures, and increase students' ability to communicate and creative use of the language they know, and students' interaction and ability to cooperate with native speakers of the language.

4.3 Results Related to English Writing Skills

A series of questions were posed, and in the same way, a Likert scale of five points was used to arrange the respondents' responses, to ascertain features of improved English writing abilities from the perspective of English language teachers in Kurdistan/Erbil. Table 5 displays the findings of the descriptive analysis:

Table 5 provides an overview of participant responses to questions assessing several areas of improved English writing skills (N=150).

Statement	Mean	Std. Deviation	Rank	Level
1. Computer-assisted learning techniques make greater use of proper writing rules, including proper capitalization, punctuation, grammar, and syntax.	3.87	1.09	5	High
2. It helps the writer improve their command of written terminology.	4.02	1.05	1	High
3. It improves the writer's argument presentation's clarity and fluidity.	3.86	1.06	6	High
4.It works to enable students to use a clear and logical structure within the text.	3.89	0.95	4	High
5.It contributes to broadening the students' background and brainstorming of ideas on the topic they will be writing about.	4.01	0.95	2	High
6.It increases the speed and ease of writing for students.	3.94	0.93	3	High
Overall	**3.94**	**0.98**	**High**	

From the perspective of experienced English teachers in Kurdistan/Erbil, it is evident from Table 5 that the arithmetic means that assess the features of increased English writing skills were high, ranging from (3.86- 4.02). It is clear that item (2), which stated: "It works on the

writer's mastery of written vocabulary," has the highest agreed-to-mean statement (4.02), and is followed second by item (5), which stated: "It broadens the students' background and fosters brainstorming of ideas on the topic they will be writing about," with a mean (4.01), and is followed third by item (6), which stated: "It increases the speed and ease of writing for students," with the lowest (3.86).

Furthermore, the overall mean for this section was (3.94) which indicates that most of the study sample agree to a large extent on the importance of using a computer-assisted learning strategy in improving students' writing skills. This result agrees with the study of (Ratnaningsih et al., 2019; Ambrose & Palpanathan, 2017) who showed that computer-assisted learning strategies improve correct writing, reduce spelling errors, and help master writing with punctuation marks and sound grammar. It also increases the clarity and fluency with which the student presents his arguments, and enables them to use a clear and logical structure within the text.

4.4 The Impact of Computer-Assisted Learning Strategies on Writing and Speaking Skills of ESL Learners

With the use of SPSS, Pearson correlation and simple linear regression analyses were carried out in order to calculate the effect of computer-assisted learning methodologies on ESL learners' writing and speaking abilities. The findings are shown in the tables below, Table (6) and Table (7):

Table 4: Summary of the linear regression model for the effect of computer-assisted learning techniques on ESL learners' speaking abilities (N=150)

(R)	(R^2)	F	DF		A	β	T	Sig
0.896	0.803	5930.141	Regression	1	0.00	0.950	77.01	0.000
			Residual	148				
			Total	149				

From Table 6 above, the model summary and overall fit statistics show that computer-assisted learning procedures have a statistically significant beneficial influence on ESL learners' speaking abilities, with the coefficient of Pearson correlation R (0.896) ($\alpha \leq 0.05$). The employment of computer-assisted learning techniques is responsible for 80.3% of the development in speaking abilities among ESL learners, according to the coefficient of determination R2, which came in at (0.803). Additionally, the effectiveness () of the use of computer-assisted learning techniques in improving English speaking abilities is (0.950). This indicates that ESL students' English speaking abilities improve by one step while using computer-assisted learning techniques (0.950). The value of the computed (F) reached (5930.141) and is significant at the level of (α 0.000 ≤ 0.05), which indicates the significance of this impact.

Table 5: Linear regression's model summary for the impact of computer-assisted learning strategies on the writing skills of ESL learners (N=300)

(R)	(R^2)	F	DF		A	β	T	Sig
0.894	0.799	10826.480	Regression	1	0.00	1.021	104.050	0.00
			Residual	148				
			Total	149				

From Table 7 above, the model summary and overall fit statistics show that computer-assisted learning procedures have a statistically significant beneficial influence on ESL learners' writing skills, with the coefficient of Pearson correlation R (0.894) at (0.05). The employment of computer-assisted learning techniques was responsible for (79.9%) of the development in ESL learners' writing skills, according to the coefficient of determination R2, which came to (0.799). Additionally, the effectiveness () of the use of computer-assisted learning techniques in improving English writing abilities is (1.021). This indicates that English writing abilities for ESL learners improve by one step when using computer-assisted learning techniques (1.021). The value of the computed (F) reached (10826.480) and is significant at the level of (0.000 0.05), which indicates the importance of this impact.

This connection may be explained by the fact that computer-assisted learning tactics incorporated interactive techniques, games, and scenarios that inspired and motivated students to interact with the computerized learning material voluntarily and independently, enabling them to develop this talent also helped with the development of conversational English language abilities by allowing students to practice accurate pronunciation, pick up language skills on their own, talk repeatedly, and pique their interest and passion, which is compatible with the research of language acquisition (Ratnaningsih et al., 2019; Al-Janaida, 2017; Abbas, 2013; Palpanathan, 2017; Davood, 2017).

It also contributed to the development of writing skills in the English language through the gradual method of teaching writing, as it works on teaching student's vocabulary as a first step and provides an opportunity for students to collect as many elements of vocabulary as necessary to write the paragraph. In addition to training students on dictation, knowing the necessary punctuation marks, the structure of sentences to form paragraphs, and other correct writing instructions and steps, which is also consistent with the study (Ambrose & Palpanathan, 2017; El-Ghonaimy, 2015; Naba'h et al., 2009).

5. Conclusion & Recommendation

The significant renaissance that our world is currently experiencing, as well as incredible technological breakthroughs with diplomatic,

economic, social, cultural, and educational dimensions, have all contributed to changing the nature of life and the shape of organizations in general, particularly educational institutions. To be consistent with modern living and the shift in teacher and learner perspectives in the digital age, the educational system must keep up with the rising and progressive scientific discoveries in the face of the vast difficulties that information and communication technology is rapidly generating.

Key agencies in public education institutes recommended that information and communication technologies be employed in English instruction. As a result, the present method of teaching language is through talent. The English language, like other languages, is made up of four talents divided into two categories: abilities to express and knowledge to receive information. Writing and reading are expression skills while listening and speaking are acquiring skills.

Hence, this study sought to better understand how English language instructors at Kurdistan Universities/Erbil perceived the effects of computer-assisted learning methodologies on the writing and speaking abilities of ESL students. Because it makes use of a variety of contemporary learning methods and resources, the study revealed that the majority of the study sample strongly agreed on the significance of employing computer-assisted learning strategies in the teaching of English for advanced stages. Students are encouraged to connect and speak with one another, which improves their passion for learning and helps them participate in activities that help them improve their English language abilities.

The study also showed that the teachers agree on the importance of using computer-assisted learning strategies in enhancing students' speaking skills in terms of proper pronunciation and improving vocabulary understanding and production, which enhances the level of students' speaking skills. The results also stressed the importance of using a computer-assisted learning strategy in improving students' writing skills, as those strategies improve correct writing, reduce spelling errors, and help master writing with punctuation marks and sound grammar. It also increases the clarity and fluency with which the student presents his arguments, and enables them to use a clear and logical structure within the text.

Finally, the study concluded that there is a statistically significant positive impact of computer-assisted learning strategies on the writing and speaking skills of ESL learners in Kurdistan/ Erbil at a significant level of ($\alpha \leq 0.05$). The study explained this effect by pointing out that computer-assisted learning strategies included interactive techniques, games, and other activities that encouraged and motivated students to interact with the computerized learning material voluntarily and unsupervised, enabling

them to develop this skill. The progressive technique of teaching writing, which focuses on building students' vocabulary as a first step and gives them the chance to gather as many vocabulary items as necessary to compose a paragraph, also helped to develop writing abilities in the English language.

Recommendations:

In light of what the researcher has found, these are the key recommendations of this research:

- There is a strong desire to teach the four English language skills (reading, listening, speaking, and writing), particularly writing and speaking.
- Because of its impact on students' emotions and drive to learn, the basic level employs electronic software.
- Directing English language instructors to use educational software as part of their training and qualifying processes.
- The application of current educational methods and strategies, such as the usage of educational software.
- Moving away from memory in general, and from memorizing in acquiring the four English language abilities in particular.

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Investigating the Impact of Utilizing Computer-assisted Learning Strategies on Speaking and Writing Skills of ESL Learners: A Survey

In today's society, technology has become an essential component, and this is particularly true in the study of foreign languages. The use of modern technologies in English language teaching and learning has already dominated pedagogical discussions and debates, prompting prominent figures and educators in the area to investigate the potential benefits of their use of these tools in a way that produces interactive, fascinating, and dynamic results. The purpose of this study is to look at how computer-assisted learning methodologies affect ESL students' speaking and writing abilities.

Therefore, the researcher created this questionnaire to gather information relevant to the study's topic to meet the study's objectives. A sample of English professors in advanced programs at Kurdistan institutions in Erbil will be subjected to this questionnaire.

It shouldn't take you longer than 10-15 minutes to finish this quiz. Additionally, because your participation in this study is entirely optional, you have the freedom to end it whenever you choose for any reason. Your replies will be quickly and securely deleted if you decide to do so.

I want to thank you in advance for volunteering your valuable time to this project. Please do not hesitate to get in touch with me using the information provided if you have any more questions or need further explanation.

With best regards

Part (1): General information

1. The purpose of this part is to gather general information about the research sample that will get the questionnaire. Therefore, please check

the box next to the answer you believe is the most suitable for each of the following questions:

2. Gender:

□ Male □ Female

3. Age:

□ 20-30 years □ 31-40 years □ 41-50 years □ more than 50 years

3. Qualifications:

□ Bachelor's Degree □ Master's Degree □ Doctoral Degree

4. Number of years of experience:

□ less than 3 years □ 3-10 years □ 10 to 20 years □ More than 20 years

Part (2): The impact of computer-assisted learning strategies on the writing and speaking skills of ESL learners

1- Computer-assisted learning strategies						
No	**Question**	**Strongly agree**	**Agree**	**Neutral**	**Disagree**	**Strongly disagree**
1.	1.Computer-assisted learning strategies are a creative and effective alternative for English language teachers.					
2.	Computer-assisted learning techniques include examinations, dictionaries, and the ability to send and receive messages to and from lab trainees, allowing the instructor to control and illustrate what he intends to accomplish in his instructions.					
3.	Computer-assisted learning methodologies allow learners to develop at their speed and solve learning difficulties on their own.					
4.	Computer-assisted learning methodologies enable teachers to offer rapid feedback, inform students if their responses are accurate or incorrect, and supply the proper solution if they are incorrect.					
5.	Computer-assisted learning tactics boost student motivation by personalizing information, moving items on the screen, and giving practice tasks that incorporate challenge and interest.					

6.	Computer-assisted learning methodologies help students enhance their four language skills (writing, reading, listening, and speaking) as well as their critical thinking abilities.					
	2- English Speaking Skills					
1.	Computer-assisted learning strategies contribute to improving students' pronunciation so that ESL learners' pronunciation is similar to that of a native speaker.					
2.	Computer-assisted learning strategies contribute to improving vocabulary understanding and producing that enhances the level of conversation.					
3.	Computer-assisted learning strategies contribute to improving the accuracy of the conversation in terms of selecting the correct grammatical structures.					
4.	Computer-assisted learning strategies increase students' ability to communicate and creatively use the language they know.					
5.	Computer-assisted learning strategies increases students' interaction and ability to cooperate with native speakers of the language.					
6.	It increases students' fluency and reduces pauses and gaps in student speech.					
	3- English Writing Skills					

No	Question	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1.	Computer-assisted learning techniques make greater use of proper writing rules, including proper capitalization, punctuation, grammar, and syntax.					
2.	It helps the writer improve their command of written terminology.					
3.	It improves the writer's argument presentation's clarity and fluidity.					
4.	It works to enable students to use a clear and logical structure within the text.					
5.	It contributes to broadening the students' background and brainstorming ideas on the topic they will be writing about.					
6.	It increases the speed and ease of writing for students.					

Thank you for your cooperation…