

RESEARCH
ARTICLE**Mechanical engineering students' attitudes towards computer-assisted English language learning****Redouane Izidi**

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Email id: izidi.redouane@univ-oran2.dz, ORCID iD: 0009-0009-3017-1402**Doi Serial**<https://doi.org/10.56334/sci/8.6.18>**Keywords**

Computer Assisted Language Learning (CALL); English for Specific Purposes (ESP); Language Laboratory; mechanical engineering; students' attitudes.

Abstract

As English for Specific Purposes (ESP) gains prominence in the engineering academic disciplines, the traditional language teaching methods are increasingly falling short in meeting students' specialized needs. Computer-Assisted Language Learning (CALL) has thus emerged as a promising alternative for enhancing students' discipline-specific language skills. Indeed, the effective implementation of such innovative methodology depends not only on a thorough analysis of students' need but also on a clear assessment of students' attitudes. This study aims at exploring the mechanical engineering students' attitudes and preferences towards CALL. In order to achieve this purpose, a quantitative research methodology was adopted. A self-designed questionnaire containing nine closed-ended questions was administrated to a total of thirty volunteering freshmen LMD students from the Department of Mechanical Engineering at the University of Science and Technology, Oran U.S.T.O.-MB. The results revealed that the participants are positively aware of the CALL great potential and benefit it offers for improving their English language skills and are manifesting a number of positive signs that show their preparedness to actively engage in a computer-integrated English language environment. The mechanical engineering students are also demonstrating highly-positive attitudes and preferences towards CALL with slightly more inclination to the implementation of the language lab method. Such implementation should occur through gradual transition via blended learning and requires some major strategic pedagogical interventions, including the reform of institutional technological structure and the provision of training and professional development for the ESP practitioners.

Citation

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Introduction

Today, English has become the language of science and technology. Physicians, biologists, computer programmers and engineers all have to be competent in English in order to keep up with the latest development in their field of specialisation. Mechanical engineering students are no exception. Indeed, they use English in their respective academic discipline for a variety of purposes. In many instances, they find themselves conducting bibliographical research, writing manuscripts, articles, and patents in English. Thus, their mastery of the English language is expected to be at least at the medium level.

However, and in reality, their English language proficiency appears to be quite limited and the reason for that could mainly be attributed the traditional method they have been instructed with and which seems not very promising in achieving the desired outcomes. Therefore, the implementation of the CALL method represents an interesting possible solution to overcome their language deficiencies and develop better communication skills. Nevertheless, prior to the implementation of any innovative learning methodology, investigating students' attitudes is a must. In other words, it is essential to understand how students perceive and evaluate CALL as their positive or negative

attitudes may have a significant impact on the success or failure of the language learning process (Lasagabaster & Sierra, 2003).

The present research attempts to explore ESP students' attitudes towards CALL with special attention given to first year mechanical engineering students at the University of Science and Technology Mohamed Boudiaf - Oran, Algeria - as a case study. In this attempt, the following research questions were formulated:

- 1- What are the mechanical engineering students' attitudes towards CALL?
- 2- Which learning method is mostly preferred by the mechanical engineering students when learning ESP?

1. Literature Review

The integration of CALL in language learning environments has gained significant attention in recent years due to its potential to enhance the language learning experience. Numerous studies have investigated students' attitudes towards the use of computers in the English language classrooms, focusing on various aspects of how CALL impacts both learning outcomes and learners' perceptions. This literature review examines several studies that explore students' attitudes, perceptions and preferences towards CALL across different academic disciplines and highlights some common challenges and insights from the research.

One of the recurring findings across studies is that students generally hold positive attitudes towards the use of computers in language learning. For instance, Meharet (2012) conducted a study on students' attitudes towards integrating computers in ESP class at the University of Chlef - Algeria. The study involved two questionnaires distributed to both students and their English teacher, with a sample consisting of forty second-year LMD (Licence Master Doctorat) students from the department of Computing. The findings indicated that both the students and the teacher had positive attitudes towards CALL, suggesting that the integration of technology in language learning was viewed favorably by both parties. The students appreciated the role of computers in facilitating learning, while the teacher also saw potential in using CALL to enhance teaching effectiveness.

Similarly, Benkrama's (2018) research investigated the implementation of computer technology in the Algerian high school by exploring teachers and students attitudes towards CALL. In her mixed-method research, the qualitative data was gathered through interviewing eight teachers and the quantitative data was collected through a questionnaire distributed to sixty students from two different high schools in the city of Mostaganem - Algeria. The research results revealed that students generally had positive attitudes towards the implementation of CALL. In particular, students appreciated the interactive and engaging nature of CALL, which allowed them to work more autonomously. However, teachers' opinions were more divided. Those with long experience claimed unfamiliarity with CALL and expressed technophobic attitudes and resistance to the integration of technology into their teaching practices. Yet, some other teachers showed positive attitude towards using computers. This divergence highlights the importance of addressing both students and teachers' attitudes when implementing CALL in educational settings.

In the same vein but another context, Krsmanović (2021) addressed the engineering students' attitudes towards the use of CALL. The sample of this study consisted of one hundred and eight undergraduate and postgraduate students from the Faculty of Technical Sciences Čačak - Serbia. The participants completed a fifteen items questionnaire designed in Google Forms application and administered via e-mail. Krsmanović reported that CALL is perceived as an efficient supporter of the EFL teaching and learning process as it generally improves students' language competence and increases their engagement in self-study. Additionally, and in a related academic discipline, Chamundeswari and Evelyn (2017) observed similar positive attitudes towards CALL among engineering students in India. The students not only enjoyed using CALL in the English as Second Language (ESL) classroom, but they also found it effective in enhancing their performance and hone their English language skills.

Some other studies highlighted the role of CALL in promoting learners' autonomy and motivation, two key factors that influence successful language learning. In particular, Rahimi and Fatemeh Hosseini (2011) observed that the Iranian high school students had positive attitudes towards CALL. Their study involved a pre- and post-questionnaire assessment, which revealed an overall improvement in students' attitudes towards CALL after engaging in computer-based language activities. This change was attributed to the increased opportunities for independent learning and the interactive nature of the computer-based tasks.

Likewise, Benboulaid's (2007) descriptive study aimed at investigating the impact of using computer technology on learning general culture. The purpose of the study was to identify the attitudes and opinions of both students and teachers towards the use of computer technology as a didactic support to achieve better learning. Two instruments were used for data collection: a questionnaire administered to a total of one hundred first year students from Department of English, University of Batna - Algeria - and an interview with five English teachers. The researcher found that using computer technology for teaching with techniques based on the stimulation of the senses which simultaneously allow the interaction of learners and teachers enriches the learning and teaching experiences and enhances knowledge acquisition. This multisensory engagement fosters better knowledge acquisition and motivates students to take an active role in their learning. Additionally, the interactive nature of CALL tools allows students to practice language skills at their own pace, further enhancing their autonomy and motivation to learn.

While students' attitudes towards CALL are generally positive, some concerns and challenges persist, particularly regarding the complete replacement of traditional teaching methods with computer technologies. Rahimi and Fatemeh Hosseini (2011) found that although students appreciated the benefits of using CALL, they were reluctant to rely solely on computer-based instruction. The students expressed a preference for blended learning, where traditional face-to-face teaching is combined with CALL, recognizing the importance of human interaction in the learning process. This highlights a significant limitation of CALL. While students value its potential, they continue to recognise the significance of traditional teaching methods and do not consider computers as a substitute for human instructors.

Moreover, Benkrama (2018) reported that some teachers in her study were hesitant regarding the implementation of CALL due to unfamiliarity with the technology and a general technophobic attitude. This finding emphasizes the need for teacher training and professional development to facilitate the effective integration of CALL into language classrooms. Furthermore, the disparity between students' positive attitudes and teachers' resistance to using technology suggests that successful CALL implementation requires not only student engagement but also teacher support and competence in using technological tools.

Attitudes are an essential factor in the successful adoption and use of technology in language learning. As technology continues to play a central role in modern education, understanding how attitudes towards technology shape learning outcomes will be critical for ensuring the effective integration of CALL into language learning. The studies reviewed here collectively demonstrate that students tend to have positive attitudes towards the use of CALL, particularly due to its interactive, engaging, and autonomous nature. CALL has been shown to enhance language learning outcomes, increase student motivation, and promote learner autonomy. However, challenges remain, particularly in terms of teachers' resistance to technology and students' preference for blended learning rather than the complete reliance on computer technology. These findings suggest that for CALL to be successfully integrated into language teaching and learning, both students and teachers need to be supported through appropriate training, and a balanced approach that combines traditional and technological methods.

2. Methodology

There is a variety of research methods that can be employed when conducting an educational research. However, it is the investigator's duty to select which method is the most appropriate. This selection depends to a large extent on the nature of the problem, the type of information that needs to be collected and the sample involved. In this research, we have chosen a descriptive research design to get insights into students' attitudes and preferences in regards to the subject matter. A descriptive analysis was carried out to reveal and represent with accuracy the current situation. This research method is widely used in social science studies for its ability to decode, interpret and evaluate events in addition to its potential to analyze participants' perspectives on various subjects (Woods, 2005)

The population included first-year undergraduate LMD students from the Department of Mechanical Engineering at the University of Sciences and Technology Oran. The sample was composed of thirty volunteering students among whom sixteen males and fourteen females. All participants were native Arabic speakers and their age ranged between eighteen and twenty years old.

In order to gather the needed information for this research, a paper-based questionnaire was developed to collect data on students' basic information, opinions, attitudes, and preferences towards the integration of computer technology in English language learning. The questionnaire designed contained nine items, all of which were closed-ended questions. Response formats ranged from dichotomous items to five-points Likert scale. The research tool was originally designed in English and then translated into students' native language (Arabic) to ensure accurate understanding of the questions. It is worth mentioning that a prior pilot study of five students from the same population was conducted to evaluate the clarity of the questionnaire and identify any issues that might hinder the effectiveness of the data collection process. Ethical considerations were also observed throughout the study process. The participants were informed of the purpose of the study and were given the opportunity to ask questions and seek clarification before and during the process. Anonymity was preserved by ensuring the participants that no identifiable personal information would be recorded and confidentiality was maintained by storing the data in a secure place and restricting its use to academic purposes only.

3. Results and Discussion

Question 1: Do you own a personal computer (PC)?

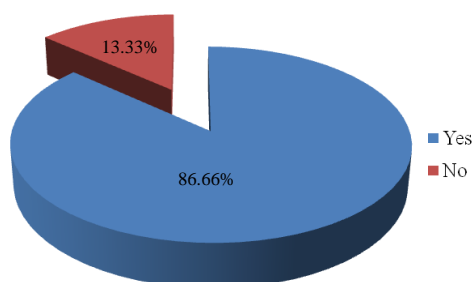


Figure 1: Students' Computer Ownership

The first item from the questionnaire was an introductory question aiming at measuring the degree of students' accessibility to personal computers. The graph in figure 1 indicates that the majority of the participants (86%) own a personal computer. The remaining four participants (13%) reported not possessing a computer or any other type of personal computing devices at their household. This situation could mainly be attributed to the economic disadvantages some students face while pursuing their studies at the university level.

Equitable accessibility to computer technology has been identified as a significant factor for a successful CALL integration (Warschauer & Healey, 1998). In the absence of such adequate accessibility, some learners may experience difficulties in engaging with computer-based language learning materials or developing the necessary digital competence for today's academic and professional success.

The high rate of personal computer ownership reported by the participants (86%) is very promising. It suggests a generally favorable environment for a future implementation of CALL in the Mechanical Engineering Department. However, the existence of a minority (13%) who lack access to computer technology presents a persistent issue requiring strategic action from the institution to reduce the gap of the digital divide and avoid the risk of digital marginalization.

Question 2: How would you rate your proficiency using computers?

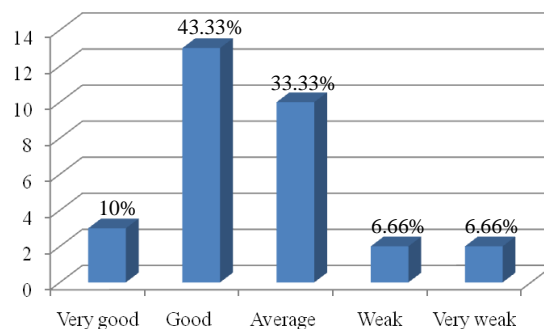


Figure 2: Students' Computer Proficiency

The rationale behind the second question from the questionnaire was to probe students' level of computer proficiency. Results displayed in the graph above revealed that almost half the respondents (43%) considered themselves as proficient or good computer users, only three students (10%) found themselves having more control over computer technology and 33% of the participants had an average level while four students (13%) rated their computer proficiency as either weak or very weak when dealing with computer devices. From these findings, one can notice an overall positive self-assessment of digital proficiency among the mechanical engineering students. A large portion of these students believe they have more control over technology and rate their computer skills as good or advanced which seems quite reasonable. In fact, students in scientific and technical fields often tend to demonstrate higher levels of computer literacy due the nature of their academic programs that require frequent use of computer hardware and software applications in their field of specialisation. This observation implies that the mechanical engineering students possess sufficient computer skills that can enable them to navigate in a future CALL environment without facing major difficulties.

Concerning the minority of the correspondents who rated themselves at the lower end of the scale, their limited computer proficiency could mainly be attributed to the absence of personal computers in some economically disadvantageous homes (as seen in question 1) which itself may lessen the opportunities for exposure to practice with technology. Therefore proper support mechanism such as computer training and tutorials should be given careful attention in order to help this specific category of students overcome the challenges associated with low computer literacy and facilitate their effective engagement in a CALL environment.

Question 3: Do you have any Computer Certificate/Degree?

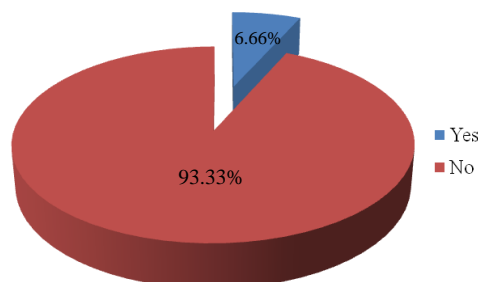


Figure 3: Students' Computer Certification

The third item from the questionnaire sought to explore whether the participants had acquired any formal qualifications in computing. Data in the figure above shows that more than 93% of the sample claimed having no computer certification. Only two students (6%) mentioned that they had successfully passed the Office Certification in Microsoft Word and Excel. This is the simplest and most basic computer certification that one can acquire within a six months period from youth house centers or private institutions. The course generally focuses on teaching how to use general computer skills under the Windows Operating System and how to deal with page formatting and formula generation both in Microsoft Word and Excel.

Despite the lack of any official computer-related certifications or degrees for the majority of the respondents, many nonetheless believe having a strong control over computer technology, rating their computer proficiency level as good or advanced (as seen in question 2). The participants' self-perceived digital competence appears to derive mainly from informal learning or autodidactic experiences, thereby neglecting formal education for the development of their digital skills. Computer qualifications acquired through formal learning is a critical factor in measuring students' potential readiness and confidence in using computers for language learning. Without formal credentials, CALL learners might overestimate their own computer skills which can subsequently negatively affect their efficacy of interaction in more advanced autonomous CALL tools.

Question 4: How often do you use computers per week?

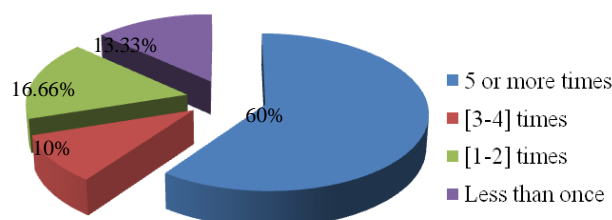
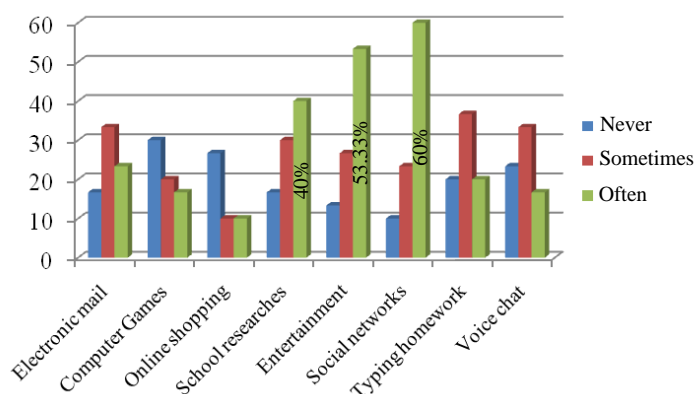


Figure 4: Students' Frequency of Using Computers

Question four investigated the participants' habitual frequency of interaction with computer technology. Students' answers to question 4 demonstrate that more than half the participants (60%) use computers more than five times per week, 10% use it between three to four times, and around 16% of the informants mentioned that their use ranged between one and two times per week. Yet, the rest of the participants (13%) indicated a low frequency of use of less than a single time per week. In other words, this means that among the surveyed sample, the most prevalent behaviour related to computer usage was the daily utilisation of computer technology. This high frequency of use suggests a significant inclination or habit among the mechanical engineering students to engage with computers regularly which logically implies a substantial integration of digital technology into their everyday routine and learning activities. In addition to that, the high frequency of using computers has a positive impact on students' performance. According to Sun et al. (2013), students who use computers on a daily basis to learn perform better than those who practice once a week or a month. Furthermore, the consistent utilisation of computers can also help students improve their computer literacy skills and knowledge (Calica et al., 2024). Nevertheless, it remains essential to differentiate between students' use of computers for general purposes and their intentional application of these technologies for language learning purposes. Frequent use alone does not necessarily guarantee students effective engagement in a CALL environment unless it is supported by pedagogically meaningful activities and developed computer skills specifically oriented toward language acquisition (Hubbard, 2009).

Question 5: What do you use computers for?



Note: this is a multiple-response selection question; percentages are calculated based on the total number of responses rather the number of respondents.

Figure 5: Computer Usage in Order of Frequency

It is evident from the graphical representation in Figure 5 that the participants use computers for a variety of academic and non-academic purposes, with varying frequencies of use. In order of frequency, most students' responses indicate that computers are more often used for social networking (60%), entertainment (53%) and school researches (40%).

These findings suggest that the most regular digital activity used by the mechanical engineering students is social networking, with Facebook emerging as the most predominant utilised social platform according to the Statcounter (2014) website. This result was found to be congruent with the study of Alothman (2016), who similarly observed that social media is the primary purpose for which university students use computer technology. Social networking has become a vital communicative medium, especially for younger Z-generation, due to the opportunities it offers to expand social circles and meet new people regardless of the constraint of place and time.

Beside social networks, the second most frequent category of computer use is entertainment, encompassing activities such as streaming videos and listening to music, while the use of computers for educational purposes was ranked at the third place. These patterns of computer use reflect that the digital devices are primarily perceived as recreational tools rather than instruments for academic learning. Therefore, and for successful future CALL implementation, students' digital habits should be redirected towards language acquisition through multimedia-based CALL activities and task-based learning by embedding language tasks within familiar digital environments including Web 2.0.

Question 6: Do you enjoy learning English using computers?

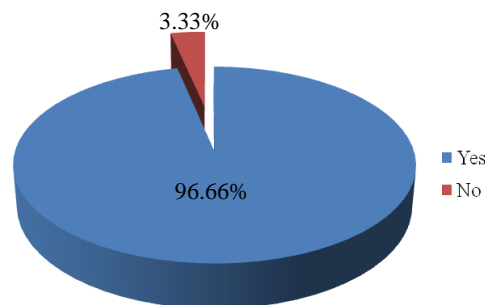


Figure 6: Students' Enjoyment

The sixth inquiry of the questionnaire aimed to gauge students' emotional response when learning English using computers. The essence of this question was to understand the overall sentiment of the mechanical engineering students towards CALL as a learning method. As it can be seen from the graph above, almost all students expressed a sense of enjoyment while learning the English language with computers. In fact, only one student chose the 'no' response option showing no interest at all in CALL. The rest majority of the informants (29 students) preferred the 'yes' answers highlighting the positive affective orientation toward learning English with the assistance of computer technology.

Comparatively, these findings resonate with previous studies such as that of Rahimi and Fatemeh Hosseini (2011), which found increased positive attitudes among Iranian students when participating in computer-based English learning activities. Likewise, in Chamundeshwari and Evelyn (2017) research, the engineering students in India not only welcomed the use of computer but also found it an enjoyable medium for improving their language skills.

It has been generally maintained that a successful implementation of any particular innovative language education approach or method depends, to a great extent, on students' attitudes. Indeed, positive attitudes can enhance students' motivation, interest and willingness to engage in the learning process, which most often leads to better academic learning achievement, whereas negative attitudes can diminish their motivation and reduced their interest, which can ultimately cause them to fail to progress in their learning (Izidi, 2024). Consequently, future ESP CALL instruction in the Mechanical Engineering Department should be built upon this positive emotional attitudes by incorporating interactive and multimodal content that sustains students' enthusiasm and facilitates meaningful language acquisition.

Question 7: Have you been taught in an English language classroom where computer technologies were used?

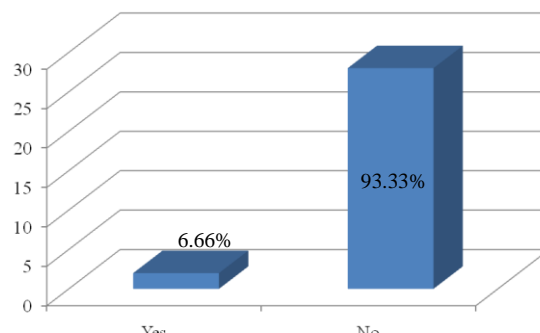


Figure 7: Computer Technology and Previous English Language Classes

Question 7 aimed at discovering whether the participants had been previously taught English language in a computer technology-rich classroom environment. It is evident by referring to Figure 7 results that a high percentage of the informants (93%) indicated that the English language classrooms they had previously been taught in were the traditional types, where no computers or other innovative technologies were used for teaching or learning. Two participants (6%), on the other hand, pointed out two different private language institutes where they were studying English and in which computers and new technologies were employed for instructional purposes. These results indicate a significant lack of students' prior exposure to the CALL methodology despite the governmental efforts to modernise the educational system. This leads one to assume that, in Algeria—and as far as the English language is concerned—CALL is still in its infancy stage and the traditional 'chalk-and-talk' classrooms are still dominating the public schools, a situation that may not align well with the digital inclinations of the new generation of learners and requires the strategic pedagogical interventions explained here in.

Institutional infrastructural reform: The notable lack of the integration of computer technology in the Algerian public educational system calls attention to an urgent institutional reform, especially at the technological infrastructural level. This reform should prioritise the establishment of digital language labs and multimedia classrooms equipped with large bandwidth and reliable internet connectivity. Implementing such resources would be a fundamental step in facilitating the transition from the traditional classroom instruction towards a more dynamic and modernised one.

Teacher Training and Professional Development: The implementation of CALL is not just a technological shift involving the integration of computer technology in the traditional classrooms but a pedagogical transformation that requires specialized knowledge of instructional design. As Benkrama (2018) notes, teachers' hesitation or resistance toward technology often originate from limited training and technophobic attitudes. Thus, professional development programs should be established to equip the English language teachers with the theoretical and practical competencies required for the effective use of CALL methodologies. Such programs should include training in using digital platforms, designing interactive activities, and evaluating learner progress through online tools.

Gradual Transitional Model via Blended learning: In situations where students had minimum or no prior CALL learning experience, a sudden shift to fully digital leaning environments may cause cognitive overload, which can in turn lead to disengagement. Adopting a blended learning model that combines the conventional method of instruction with gradually increasing doses of CALL-supported activities represents a pedagogically sound transitional model. This balance approach allows students to safely adapt to learning with computer technology without losing the pedagogical benefits of the traditional face-to-face instruction.

Question 8: Do you think computers are important in English language learning?

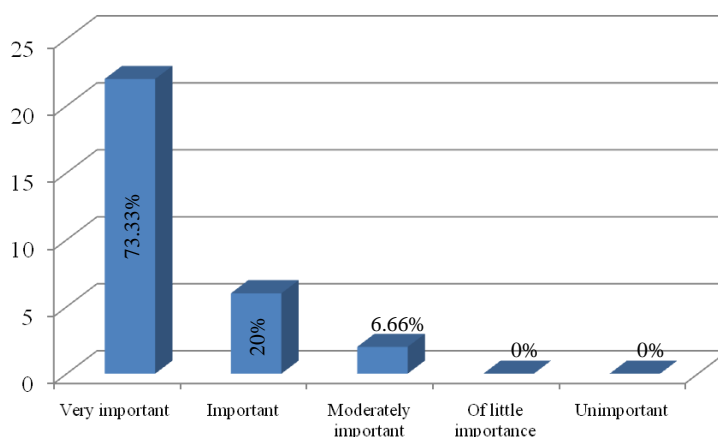


Figure 8: Degree of I

Question 8 was designed to measure the degree of importance students give to computers in relation to English language learning. A predominant share the sample (73%) considered computers as 'very important' and 20% thought it was 'important', while the rest believed it was 'moderately important'. Notably, none of the participants reported 'little' or 'no importance' to the use of computers. These results indicate that the majority of the mechanical engineering students place a high degree of importance on computer technology and acknowledge its significance in

supporting their academic studies, which suggests that they are positively aware the great potential and benefits it offers for enhancing their English language skills.

This positive perception of the importance of computer technology is further supported by responses to other questions from the current study. For example, 96.66% of students reported enjoying learning English with computers (Question 6), more than half indicated frequent computer use on a weekly basis (Question 4), and 86.66% reported owning a personal computer (Question 1). These patterns reflect students' strong familiarity with digital technology and their readiness for computer-based instruction.

However, a striking contrast emerges in 'Question 7', where 93.33% of the participants reported never having been taught using computer technologies in their previous English language classes. This disparity between students' perceived importance of digital technology and the limited previous exposure to CALL in public schools underscores a crucial disconnect between learner expectations and the actual pedagogical practice. The mechanical engineering students are demonstrating both digital readiness and a desire for modernized instruction, yet the Algerian public educational institutions have been slow in aligning with this reality.

Question 9: When learning English, which method do you prefer?

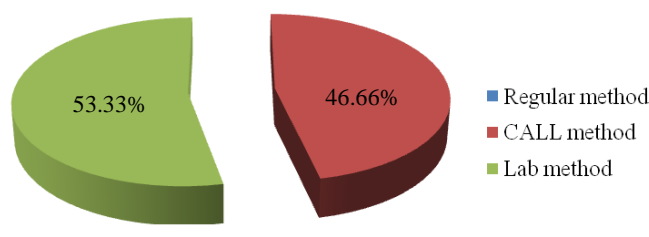


Figure 9: Students' Most

Regarding the last item from the questionnaire, the participants were invited to identify their most preferred learning method for learning English. The results revealed that 53% of the participants preferred the Language lab method and approximately 46% opted for CALL. None of the respondents (0%) expressed a preference for the traditional method of teaching. These findings reflect a clear students' preference for technology-enhanced learning instruction with a near-equal distribution between the language lab and CALL methodologies.

To put it differently, the mechanical engineering students are really not satisfied with the traditional teaching method they have been taught with over the years and believe that any innovative methodology incorporating computer technology would be considered more preferable and effective in improving their English language skills. The current results echo the finding of Houari (2020) who observed that the younger generation prefers the modern learning method integrated with technology believing that such approach would enhance their learning experience. Moreover, students' total rejection of the traditional teaching method in favour of computer-assisted alternatives marks a generational shift in learning from passive absorption of instructor-delivered content to interactive, learner-centered experiential learning assisted by computer technologies. This shift is not unique to the present study, Meharet (2012) similarly observed that ESP learners increasingly appreciate the CALL methodology for its ability to foster autonomy, motivation and context-rich language learning. For students in scientific and technical fields, the use of technology for language learning not only enhances engagement but also aligns more closely with their academic and professional area of expertise, thereby reinforcing the relevance and authenticity of using computers for ESP learning.

It is worth reminding that the present study aims at evaluating the mechanical engineering students' attitudes towards CALL. This study is far from claiming perfection, just like any other research, it has several limitations that should be acknowledged. The most obvious one is that of the homogeneity of the sample and its relatively small size. The sample consisted of only thirty participants all of whom were first-year students from a single university and a specific department. The small sample size along with the lack of institutional and demographic diversity may constrain the extent to which the findings can be generalized to other academic levels, disciplines, or educational contexts.

Another limitation is related to the research instruments. In the present research, only one quantitative tool—a self-designed questionnaire—was used to collect the data. The internal consistency of this instrument could not have been formally assessed using measures such as Cronbach's alpha, which poses limitations in terms of establishing its reliability and psychometric robustness. The validity of the questionnaire's translation into the Arabic language was also not formally established but close attention was given to preserving meaning and clarity during the translation of each item. These limitations suggest that further future experimental research should be conducted. Such research should adopt a larger and more diverse sample, apply rigorous reliability testing, and incorporate mixed-methods approaches in order to provide a more in-depth analysis, enhance validity and support the generalisation of the findings to the overall EFL population.

The same research is recommended to be carried out at other departments and at different higher education levels across the Algerian universities in order to determine whether the results obtained in this research hold true in similar institutional environments. Similar researches do not have to be exclusively restricted to students' attitudes. Complementary studies focusing on teachers' attitudes and the challenges they faced are also important as they would help gain additional and valuable insights that are not otherwise available through other sources. Further complementary studies should be conducted to explore the impact of CALL and digital language labs, and to measure their effectiveness in comparison to the traditional methodology. The use of social media platforms such as Facebook, Twitter, Instagram and WhatsApp is another area worth investigating in future research since the majority of the present study's participants reported a frequency use of these networks. The internet quality in Algeria has been improved to a great extent for both fixed and mobile networks. The ADSL (Asymmetric Digital Subscriber Line) speed has been multiplied more than a hundred times. For the mobile network users, the 4G (Fourth Generation) of mobile telecommunication is gaining more coverage throughout the country and soon the 5G (Fifth Generation) will be released in the Algerian telecommunication market. As a future research perspective, we look forward to carry out research on the effectiveness of MALL (Mobile-Assisted Language Learning) and virtual worlds as these areas seem very promising in promoting collaborative and interactive learning.

Conclusion

Despite the great interest and effort made by the Ministry of Higher Education and Scientific Research in the last decade to modernise the Algerian University, computer technology is still to a considerable extent alienated and chosen not to be integrated into the EFL classroom in general and ESP in particular. In fact, the traditional method has been the norm for decades, but it is no longer effective in creating an attractive learning environment that can engage students' motivation and develop their language skills in today's fast-paced world. Indeed, CALL represents an interesting alternative that can assist students to overcome their English language learning deficiencies and improve their language proficiency level.

However, prior to any CALL implementation a careful attention to students' attitudinal research should be taken into consideration as students' attitudes play an important and a decisive role in determining the success or failure on any innovation incorporation process. Therefore, the current research aimed mainly at exploring students' attitudes and preferences regarding a future use of CALL in the Department of Mechanical Engineering at the University of Science and Technology Oran U.S.T.O.-MB.

The study came to a conclusion that the mechanical engineering students hold a highly positive attitudes and preferences towards the implementation of CALL. Additionally, the targeted population also manifests a number of positive signs that show their preparedness to actively engage in a computer-integrated English language environment if circumstances are favourable. Therefore, as a future research perspective, we recommend conducting a complementary research which takes the current study's findings into consideration to firstly implement the CALL methodology in the target department and then measure its effectiveness in comparison to the traditional method of learning. Such research would undoubtedly contribute to more relevant and enriched pedagogical implications for stakeholders and provides precious suggestions for advanced ESP practitioners.

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