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The Use of AI in Moroccan Vocational EFL Classrooms: Influencing Factors, Student Challenges, and Student Personal Gains

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Abstract

In Morocco, as in other countries around the world, the use of AI tools, technologies, and applications is on the rise in the educational field. A strong reason behind this is the ample and rapidly growing body of literature both nationally and internationally on the benefits of AI in education in general, and in language teaching and learning in particular. On that account, the current study aims to investigate how AI empowers EFL learning in vocational education through exploring the factors behind the use and application of AI tools and technologies among vocational students, the challenges that face them while using them, and students' personal gains of using them as well. A mixed method study was conducted to collect the data, including a questionnaire and a semi-structured interview. More specifically, the study recruited 113 vocational students belonging to the same vocational training institute to complete a questionnaire. Then, nine of them were selected to take part in the semi-structured interviews. The findings of the study revealed that most of the students found AI to be very effective in enhancing their English language learning, and used it mainly for translation purposes. The study also revealed that the students found technical problems and a level mismatch between personal proficiency in English and AI applications' answers as the most challenging aspects when using those applications. However, the study also showed that the students had personal gains from the use of AI, namely saving time and energy while achieving personal learning needs.

Keywords: artificial intelligence, English language learning, EFL learning, vocational education, vocational students

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1. Introduction

As the integration and use of AI tools and technologies become a trend in today's globalized world, its influence extends to education as well. In light of this, there has been a substantial and increasing body of recent research into the use and benefits of AI in education in general, and in language teaching and learning in particular, both nationally (e.g., Ezzaim et al., 2022, Moukhliss et al., 2024; Ejjami, 2024a), and internationally (e.g., Hwang et al., 2020; Dewi et al., 2021; Annamalai et al., 2023; Sol, 2024; Benabbou & Nafzaoui, 2024). Likewise, the use of AI is also becoming an emerging trend in vocational education and training. In this respect, Ejjami (2024b) highlights how AI technology is rapidly becoming more popular and changing how different skills are acquired through "enabling personalized learning, real-time feedback, and alignment with industry needs". He also points out that those changes enhance the quality of the instructional environments and keeps up with the demands of the current job market.

However, keeping up with the current job market also necessitates from vocational students to have an expected level of proficiency of English as a foreign language to engage effectively in academic and professional settings. In this regard, Pace (2021) believes that students who are good language speakers have better future job opportunities and wider prospects. In the same line of argument, Pace argues that foreign languages, with special focus on English, are not just a "an ingredient of general education but have become a prerequisite for international communication and mobility in education, on the job, and in business" (2021, p. 235). Accordingly, in the context of this prodigious digital transformation, the need to promote foreign language teaching and learning is critical to keep up with this transformation. This aligns with the view of Wei (2020) who puts forward that "the effectiveness of education and teaching is particularly important to explore innovative ways of foreign language education and teaching in vocational education during the digital transformation period" (p. 1121). That said, in order to achieve that effectiveness that Wei (2020) emphasizes on, it is crucial to understand how students make use of those 'innovative ways', namely AI tools and applications, to enhance their English language learning.

Thus, this study attempts to explore how AI empowers EFL learning in vocational education through exploring the factors, challenges and personal gains of the use and application of AI tools and technologies among vocational students in Morocco, a context scarcely explored and represented in the national and international literature especially from the students' point of

view. This is highly pertinent since teaching English as a foreign language for vocational education has become more necessary than ever in Moroccan vocational education and training institutions under the current ongoing background of digital transformation. Hence, since this study is considered unprecedented on the research of AI use in this type of education by students, it aims to present significant findings and draw preliminary conclusions to pave the way for future studies that will target the investigation of this use.

Accordingly, the objectives of the study are to determine factors behind using AI tools and applications for learning the English language, their effectiveness, and the challenges that face vocational students when using them. Furthermore, the study aims to determine the personal gains of employing AI tools and applications. To meet the research objectives, this study is designed to answer the following questions:

- How often do vocational students make use of AI tools and technologies in English language learning? And what are the AI tools and applications they use the most?
- What are the factors behind using AI tools and applications for learning the English language?
- What are the challenges that vocational students face when using AI tools and applications?
- What are the personal gains of using AI tools and applications in English language learning?

2. Literature Review

2.1. AI in the EFL educational context

UNICEF (2021) defines AI as a machine-based system capable of making "predictions, recommendations, or decisions that influence real or virtual environments" (p. 16). Chiu et al. (2023) citing others (Chiu, 2021; Chiu et al., 2022; Xia et al., 2022) define AI as "the ability of a digital machine to perform tasks commonly associated with intelligent beings, and its associated technologies are divided into various branches, such as computer vision, speech, machine learning, big data, and natural language processing." Hence, it is considered as a powerful tool that can be used in education (Dewi et al., 2021). This power is manifested in the utilization and adoption of highly "intelligent tutoring systems, chatbots, robots, and the automated assessment of all modes of digitized artifacts that support and enhance education" (Chiu et al., 2023).

In the contexts of English language education and EFL education, research on the adoption and application of AI has emerged significantly. This research has mostly targeted perceptions about AI and its use by teachers and students in the process of teaching and learning (e.g., Fitria, 2021; Wang et al., 2022; Liu et al., 2023; Annamalai et al., 2023; Xiaofan & Annamalai, 2025). It has also become one of the most trending types of research in the field of education these days (Chiu et al., 2023). In connection to this, Ghizlane et al. (2019) points out that such an emphasis on the use and research of AI in education does not only introduce new advances in terms of efficiency and personalization of learning, but it also opens new research directions for AI enthusiasts. Findings from this research also put forward that despite the inherent challenges, AI has tremendous capacity to enhance teaching and learning in education in general and in EFL education in particular (Kristiawan et al, 2024; Daud et al, 2025). In this regard, Dewi et al. (2021) emphasize how AI tools and technologies can be utilized as a means of supporting students' English learning. Such a perspective encourages the investigation of AI use for English language education at the level of vocational training as well.

2.2. English language learning in vocational training

Based on the premise that "having a good command of English is crucial for employability" (Sincer, 2017), the teaching and learning of English as a foreign language have become widespread in vocational institutions across the world. In the context of vocational education and training, English is viewed as a 'medium' that aids the students to better "understand their vocational material, construct and improve their vocational knowledge and skills, communicate their professional expertise and conduct specialist tasks, and grow their language of specialization" (Widodo, 2015 as cited in Suswanto, 2020). In today's digital age, this does not only lead to providing vocational students with an "international perspective and global identity" (Lindhal, 2015), but it also provides them with sufficient language skills that will help them find employment after completing their vocational training (Sincer, 2017). Hence, Wei (2020) recommends following the general trend of integrating foreign language education and teaching and information technology in vocational education.

2.3. AI in the vocational training context

At the level of vocational education and training, the emergence of AI technology provides more innovative opportunities for students which include "tailored learning experiences, increasing training efficiency, and connecting educational programs with changing industry

needs" (Ejjami, 2024). Ciavaldini-Cartaut et al. (2024) consider that such experiences cater for the needs of the students and meet the demands of the current job market. Such advantages brought about by those experiences largely align with the mission of vocational training institutions globally. A mission that aims to equip students with the necessary knowledge and skills to integrate in today's globalized job market (Karakaya Yildirim & Gedik Bal, 2023). This is especially important, since there is a large consensus on the positive impact of AI on vocational training and employability (Rickardo & Meiriele, 2023). Therefore, Wei (2020) recommends that vocational education and training "must conform to and closely follow the trend and pace of artificial intelligence development, form digital awareness, establish digital concepts, carry out digital practices and promote digital transformation of majors and courses" (p. 1121). Drawing from that, since AI features continue to rapidly enhance in terms of services and accessibility, it is crucial to have more insight on its use by vocational students in order to increase its educational benefits and decrease its limitations in English for vocational purposes.

2.4. Previous research on the use of AI in Moroccan Education

Concerning previous research on the adoption and use of AI in the Moroccan educational context, it has been steadily expanding. However, a large number of the studies conducted target either future teachers or higher education students. For instance, Tafhi et al. (2025) investigated university students' (n = 350) perceptions of generative AI tools, namely ChatGPT. Other studies, such as Nafidi et al., 2024, Lamrabet et al., 2024, and Lotfi and Lajaan, 2025, investigated teachers or future teachers' perceptions of AI and their use and integration of it in their work. It is worth noting that in a recent study done by Ouahani and Mahraj (2025) that explored the application of ChatGPT in ELT within the international and Moroccan contexts, they pointed out to several research gaps that are in need of further research within the Moroccan context, and how the few studies they found focused only on perceptions on the application of this tool. In light of this, the study to fill in some of the perceived gaps, especially in relation to vocational students' adoption and use of AI tools in English language learning, and contribute to the growing national and international contexts.

3. Methodology

3.1. Research approach

Both the qualitative and the quantitative approaches were used in this study. The quantitative approach which made use of questionnaires was helpful in obtaining statistical data related to

frequency of use of AI tools and applications by vocational students and their effectiveness as well as the factors, challenges, and personal gains related to this use. As to the qualitative approach which made use of semi-structured interviews, it was helpful in obtaining more in-depth insights into this use. Adopting this mixed methods approach was useful in increasing the validity and the reliability of the data and, thus, the quality of the findings.

3.2. Population and Sample

The study sample population consisted of 113 first year vocational students belonging to the same vocational training institution. The training period in Moroccan vocational institutions last from one to two years and leads to obtaining either a diploma for specialization and qualification levels or a certificate that recognizes the mastery of a certain skill (Boudarbat & Egel, 2014). In this study, the respondents recruited for quantitative data collection belonged to three different two-year specializations that offered a diploma after their end: Restaurant Agent (54%), Digital Infrastructure (32.7%), and Tailoring and Couture (11.5%). About 72% of those respondents had their baccalaureate degree, over 22% reached only grade nine, and less than 3% were first-year university student dropouts (Table 1). For the gender distribution, 50.4% of the respondents were female whereas 49.6% of them were male. Over two thirds of them (67.3%) were between the ages 16 and 20, over 28% were between the ages of 21 and 25. Out of those respondents, as can be seen in Table 2, nine vocational students were invited to take part in the semi-structured interview. Five of them were females and four were male vocational students. They ranged in age from 16 to 25. It should be noted that the respondents who took part in this study benefited from a free of charge e-learning platform called "Altissia" provided to them by their vocational training institution. However, though they believed it was useful in improving their English language learning, their use of it was infrequent and transient (See EL-Asri, 2025).

3.3. Research instruments

The main data collection instrument that was used to gather quantitative data is the questionnaire. It was designed in English and administered in Arabic (See Appendices A and B). Then, it was shared among the vocational students in two forms: an online survey which was administered through Google Forms, and a paper survey which was distributed in-person after pilot testing it among 10 vocational students. For this study, there was a specific part dedicated to answering the guiding questions raised earlier, and it included 6 items. This part was developed based on different studies (e.g., Dewi et al., 2021; Chiu et al., 2023; Sol, 2024).

Table 1. *Demographic profile of the survey's sample population*

Socio-demographic items		Percentage (%)
Gender	Missing	0.0%
	Female	50.4%
	Male	49.6%
Age	Missing	1.8%
	Under 16	0.9%
	16-20	67.3%
	21-25	28.3%
	Over 25	1.8%
Specialization	Missing	1.8%
	Restaurant Agent	54.0%
	Digital Infrastructure	32.7%
	Tailoring and Couture	11.5%
Level of Education	Missing	3.5%
	Baccalaureate degree	71.7%
	9th grade	22.1%
	University student	2.7%

Table 2. *Demographic profile of the semi-structured Participants sample population*

Participant ID	Gender	Age	Level of education
1	Male	21	University student
2	Male	20	Baccalaureate degree
3	Male	20	Baccalaureate degree
4	Male	18	Baccalaureate degree
5	Female	16	9th grade
6	Female	19	Baccalaureate degree
7	Female	20	Baccalaureate degree
8	Female	17	9th grade
9	Female	20	9th grade

3.4. Research analysis

The quantitative data collected from the questionnaires was computed using SPSS software version 26.0 and Microsoft Excel and analyzed using descriptive statistics. As to qualitative data, after the data was recorded, transcribed, and translated from Arabic to English using machine and forward translation, they were themed and analyzed according to the guiding questions.

4. Results

This section explores findings from the questionnaires and the semi-interviews. First, before delving into the factors that motivate vocational training students to use AI, the challenges they face them while doing so, and the personal gains they have from this use, it was crucial to identify the frequency of use of vocational students of AI tools and technologies in English language learning, and the main AI tools and technologies they often used.

As shown in Figure 1, out of the 113 respondents, only 7.1% (n = 8) stated that they always used AI tools and applications, while 30.1% (n = 34) indicated that they often used them, and 33.6% (n = 38) reported that they sometimes did. Meanwhile, 17.7% (n = 20) answered that they rarely relied on those tools, while 11.5% (n = 13) reported that they never did. As to the AI tools and applications most frequently used by the respondents who answered affirmatively to the use of AI in the context of English language learning, as illustrated in Figure 2, a notable percentage of them relied on “Chat GPT” (22.1%), while others divided into smaller groups that used tools such as “My AI”, “Elsa Speak”, and “AI Chat” among others.

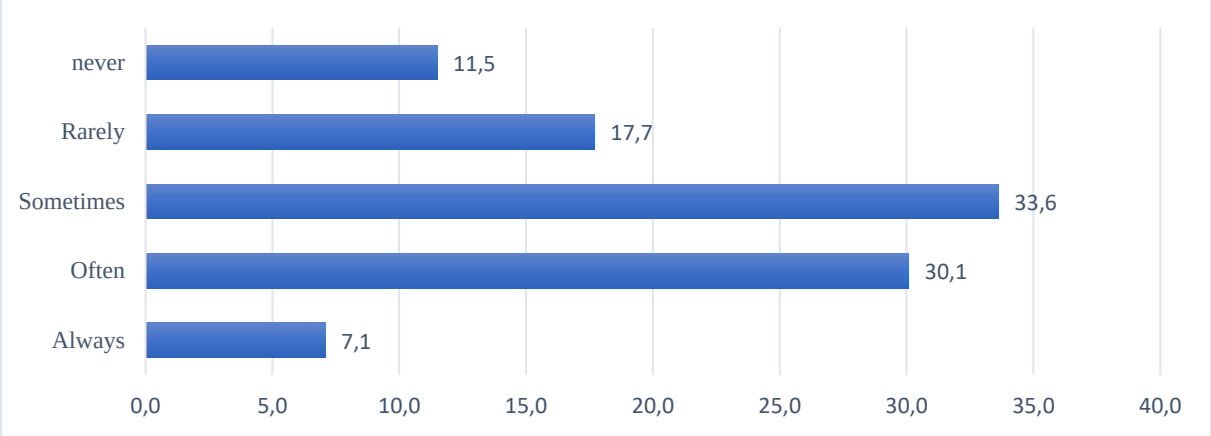

Figure 1. *Distribution of AI usage frequency among vocational student respondents*

Then, the respondents who answered that they used those tools (n = 100), were asked to report on the effectiveness of the AI tools and applications they used in enhancing their English learning experience. The results as shown in Figure 3 indicate that a great majority of 71% of

them stated that they found them very effective, 22% said they were somewhat effective, while a minority of 7% found them to be not effective at all.

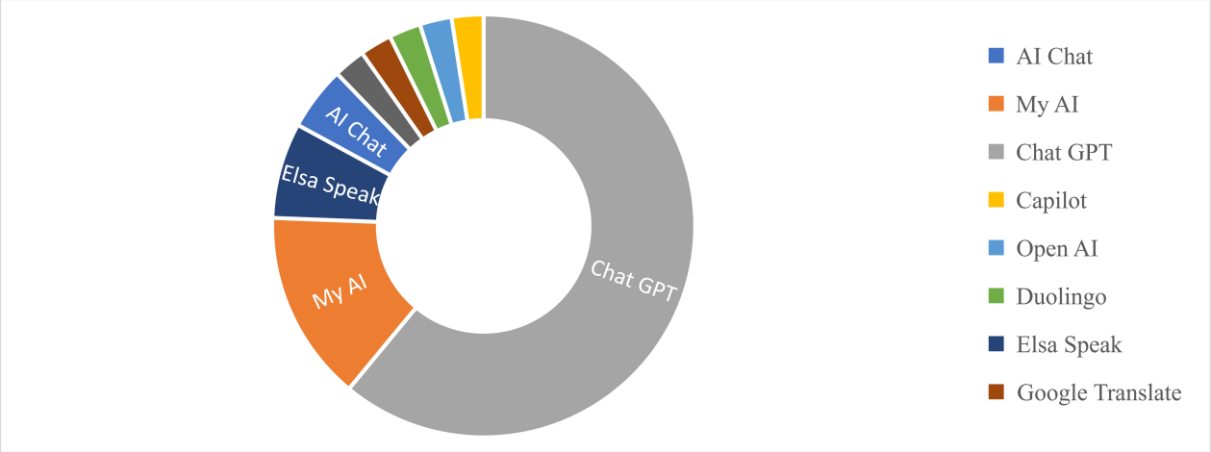

Figure 2. *The AI tools and applications frequently used by vocational student respondents*

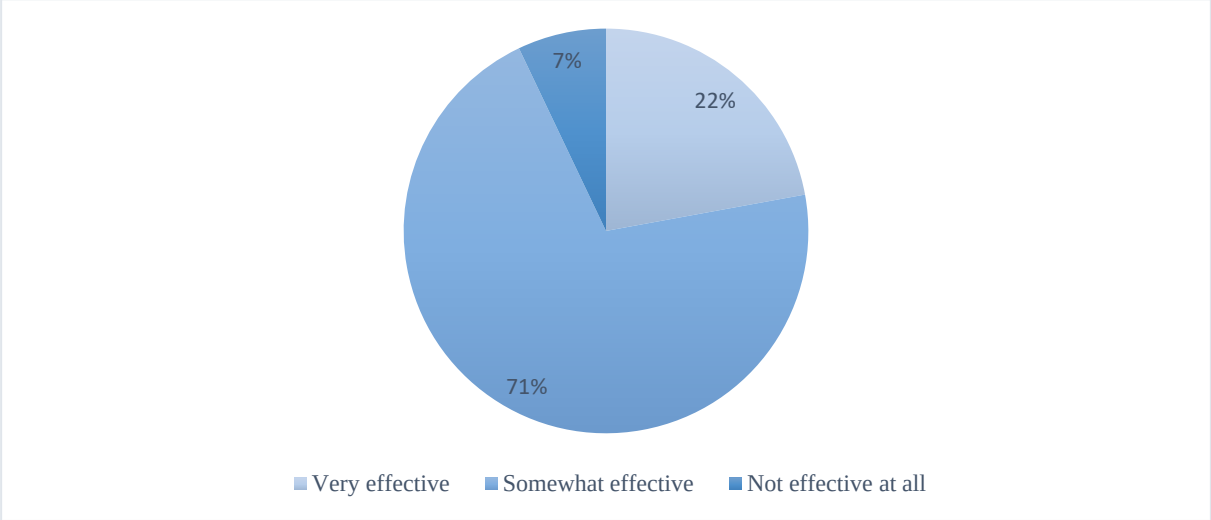

Figure 3. *Respondents' perceptions of the effectiveness of AI tools and applications in enhancing their English language learning experience*

In regard to qualitative date related to the use and effectiveness of AI tools and applications, eight out of the nine Participants reported the use of those tools to varying degrees, ranging from always to sometimes. For instance, Participant 2 stated, "My use of AI tools is daily and regular. I also use Duolinguo consistently because it has all types of learning, reading, writing, listening, and speaking." Surprisingly enough, he also reported that he never used ChatGPT because according to him "The answers it gives exceed my linguistic and intellectual level." Instead, he reported the use of Meta AI, specifically the one built into Facebook and WhatsApp. Similarly, Participant 3 reported a regular use of AI; he stated, "I use AI tools and applications regularly as I use My AI regularly and at a daily basis." Participant 4 used the adjective "Extensive" to describe his use

of those tools, especially his use of ChatGPT. Meanwhile, though Participants 5, 7 and 8 reported the use of ChatGPT, they claimed that their use was only "sometimes". Participant 6 answered that she uses these applications, namely ChatGPT and SimpleAI, "only when necessary". Likewise, Participant 9 also said that she used those applications "only when necessary". In terms of the effectiveness of AI, it is noteworthy, that all of the participants found AI to be "helpful" "very helpful" in doing completing their assignments and class work. As to Participant 1, he reported that he never used AI applications and tools in his learning because according to him, "I don't use it because it often gives me more information than I personally know, and its use in class or exams is obvious and looks like cheating."

In terms of the factors behind using AI tools and applications in English language learning, Figure 4 illustrates the distribution of selected responses to the list of potential factors provided in the questionnaire. The most frequently reported factor was "translation purposes" (70.5%), while the second most reported reason that motivated their use of AI was their "low level of English" (46.4%). "Future professional and career needs" was another widely cited factor (33%), followed by "personal curiosity" as another slightly common factor (25%). A smaller but notable percentage of respondents (18.8%) also selected the factor of "ease of use" behind adopting AI tools in their learning. As to the other listed factors, 12.5% of the respondents selected "poor topical knowledge" as one of their motivating reasons, while "recommendation from others" was selected by 11.6% of them. Finally, "cheating in exams" and "laziness" were the least selected motivating factors behind the use of AI in the context of English language learning as they were only chosen by 7.1% and 6.3% of the respondents, respectively.

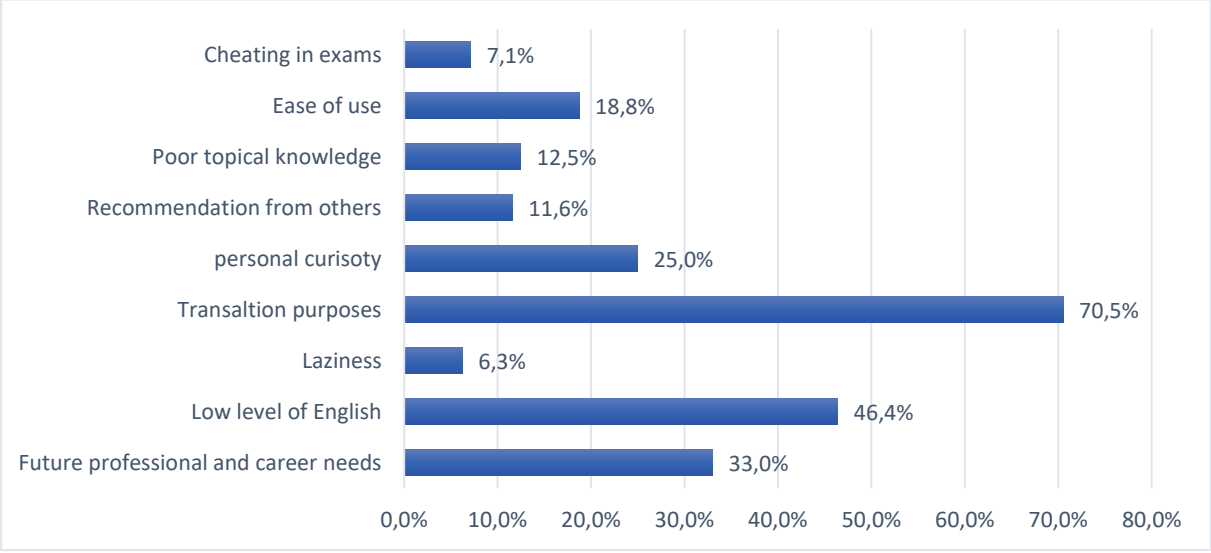

Figure 4. *Factors behind using AI tools and applications according to respondents (n = 100)*

Similarly, as can be seen in Table 3, the answers of the interviewed vocational students from the semi-structured revealed three main factors with "Translation purposes" as the primary factor behind their use of AI applications for English language learning. When further asked about what they translated how they carried out this translation, and why they opted for translation, all of the five Participants who reported using AI for translating described a similar procedure which began with them writing either full writings or chunks of sentences in Arabic, copying or typing them into the AI application they usually use, and asking it to translate into English. Some of the reasons for using for translation as cited by them were "To keep my writing original" (Participant 6), "Because the teacher insists we depend on ourselves" (Participants 2 and 7), "I learn better this way and the ideas are mine" (Participant 9). As to the second two factors cited by the Participants. they were "Ease and simplicity of learning" and "Speed of accessibility to the information". For instance, Participant 3 stated, "I use this type of application because it has all the conditions I want to develop my knowledge level, including: accurate information, speed in finding information, and quality of platforms." In the same vein, Participant 8 reported, "I find their use easy and simple, and they help me in class projects and finding words fast."

Table 3. *Frequency of Themes of Interviewed Participants' Factors Behind using AI tools and applications*

Attributes	N. of Participants	N. of References
Translation purposes	5	6
Ease and simplicity of learning	3	4
Speed of accessibility to the information	3	4
Total	**8**	**14**

Regarding the challenges that face vocational students while using AI tools and applications, Figure 5 shows the respondents' responses from a list of challenges given in the questionnaire. Close to 40% of the respondents encountered "technical problems (limited/unreliable internet access, systems complexity, etc.)" as the primary challenge when using AI. Around 27% considered the "decrease in critical thinking and problem-solving skills" as another common challenge, while 25.5% of them selected "fears of unreliable information." Nearly the same percentage of respondents, 21.7% and 20.8% chose "poor technical skills and knowledge" and "shortage in technical support and training", respectively. Fewer than 19% reported "overuse and over-dependence" as a significant challenge, whereas slightly above 15% of the respondents chose "teacher's disapproval" as one of the challenges that they encountered.

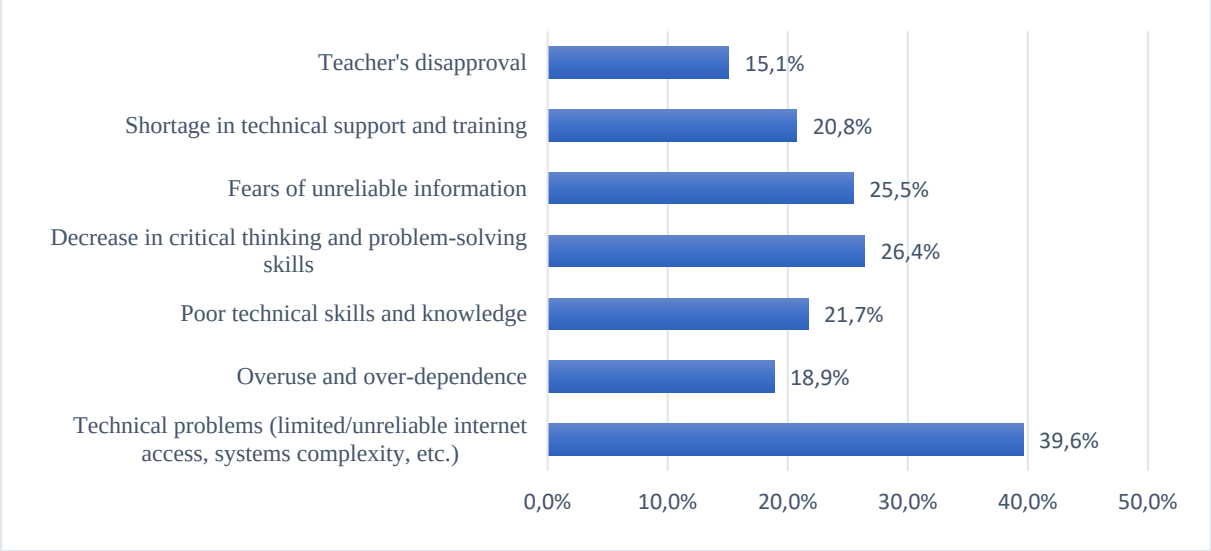

Figure 5. *Challenges in using AI tools and applications among respondents (n = 100)*

The interviewed vocational students also highlighted to three similar challenges to the ones listed in the questionnaire which were "limited and unreliable access to the internet," "fear of unreliable," "teacher's disapproval." However, 4 of the participants reported the "level mismatch between personal proficiency and AI apps' answers" as a key challenge when using those applications in the context of English language learning (Table 4). For instance, Participant 7 stated, "Sometimes artificial intelligence provides information that is irrelevant and does not suit my linguistic, intellectual, and academic level." Likewise, Participant 4 cited this challenge along with the teacher's disapproval when it came to his overdependence on AI in class. He stated, "One of the difficulties I face when using these applications is not understanding the answers they provide. The answers are often irrelevant and beyond my level. Also, my teacher doesn't approve of me using them and encourages me to be independent and think for myself." As for Participant 8, she noted how she tried to overcome this challenge by not fully depending on AI in her writing assignments. She said, "… But, I don't depend on it in writing full reports because sometimes it may give incorrect answers or answers that exceed my level."

In terms of the personal gains of using AI tools and applications in English language learning, as can be seen in Figure 6, a significant majority of over 72% chose "personal learning needs" as their primary personal gain. Another notable proportion of about 47% reported that "saving time and energy" was also a major gain, while 33.3% also chose "access to smarter learning systems" as one of their personal gains. Finally, "speed and increased practicality" was selected by over 24% of the respondents, and "improved accessibility to information" was chosen by more than 23%.

Table 4. *Frequency of Themes of Interviewed Participants' Challenges in using AI tools and applications*

Attributes	N. of Participants	N. of References
Level mismatch between personal proficiency and AI apps' answers	4	4
Limited and unreliable access to the internet	3	3
Fears of unreliable information	2	3
Teacher's disapproval	1	1
Total	**7**	**11**

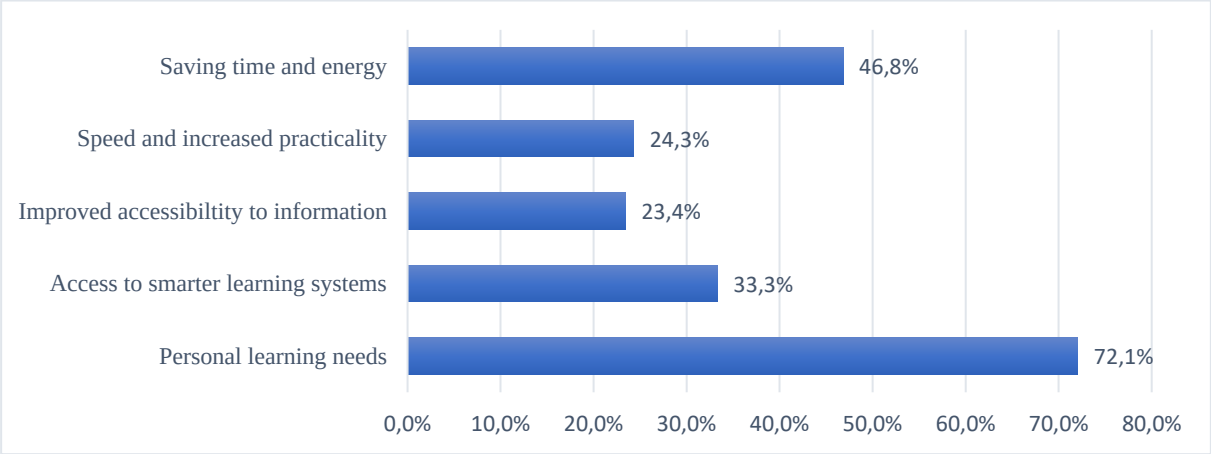

Figure 6. *Respondents' (n = 100) personal gains of using AI tools and applications*

Regarding qualitative data, the Participants accentuated two main personal gains, "personal learning needs" and "improving English proficiency" (Table 5). Intriguingly, Participant 4 openly expressed how his main personal gain was that AI did his work for him; he stated, "I use these applications because I don't have time to think. I would rather use them than to use my mind and put in the effort... there's no time." It is worth reminding that Participant's 4 use and reliance on AI tools and applications was consistent.

Table 5. *Frequency of Themes of Interviewed Participants' personal gains of using AI tools and applications*

Attributes	N. of Participants	N. of References
Personal learning needs	4	4
Improving English proficiency	3	3
Total	**7**	**7**

5. Discussion

For the first question, the findings suggest that AI tools and applications are frequently used by most of the respondents. Their responses indicate that since AI applications are becoming more common and varied, a great majority of students have come to rely on them consistently in the context of English language learning as they find them effective in improving their learning experience. This interpretation is supported by earlier studies which investigated the growing use of AI tools in education (e.g., Tsai, 2022; Sol et al., 2024; Kristiawan et al, 2024; Daud et al, 2024).

In regard to the first main guiding question of this study which aimed to identify the factors behind the respondents' use of AI tools and applications in the context of English language learning, the findings revealed that they resorted to those tools due to their low level of English and for translation purposes which aligns with data presented by Sol et al. (2024). This indicates that their use of AI remains basic and traditional, especially since some of them in the interviews reported that they translated as a way to maintain originality specifically in writing. It can be also can be attributed to their limited proficiency and practice of the English language, especially since many of them did not have the chance to continue their secondary education. Additionally, data found that ease and speed to access the information were other factors behind the respondents' use of AI in their learning, which were also considered personal gains to some of them.

The challenges that faced the respondents while using those AI tools can be divided into external and internal. For instance, most of them found technical problems, mainly limited access to the internet, as a major challenge that was even more significant than the teacher's disapproval and fears of unreliable information, among others. In regard to internal challenges, though respondents reported a decrease in their critical thinking and problem-solving skills as well as overuse and over-dependence as significant challenges, qualitative data revealed that the level mismatch between personal proficiency in English and the responses they often had from those applications was a crucial concern. This indicates their awareness that even though those tools may help them in the assignments they have in the classroom, there are still limitations concerning their overall performance and development in the language. Similar challenges were identified by previous studies, such as Daud et al., (2025) who highlighted several challenges, including technical problems, linguistic issues, and over-reliance, Alotaibi

(2023) and Bai et al. (2023) who highlighted the potential overdependence of students on AI. Additionally, in a study done by Ododo et al. (2024) that targeted 206 vocational students, they have highlighted that AI has a great potential of reducing cognitive engagement as most of them accepted information without critically thinking about it. This poses serious concerns in regard to dependency on those tools and its impact on cognitive abilities as a whole.

For their personal gains of using AI tools and applications, the findings revealed that accomplishing personal learning needs and using those tools to their advantage, including improving their English proficiency, was a key benefit. Comparable results were documented by Liu et al., (2022), Alotaibi (2023), Sol et al. (2024), and Xiaofan and Annamalai, 2025, among others. Other personal notable gains were saving time and energy and access to smarter learning systems, which reflects the efficiency and potential of those tools in improving students' learning experiences despite the persistent challenges.

6. Conclusion

The current study has attempted to investigate the use of AI tools and applications among vocational students, namely the factors that motivate their use, the challenges they encounter while doing so, and the personal gains they benefit from this use. The study first began first by identifying the frequency of use of those tools and applications among students, and found that their use of them was frequent with only very few of them who never relied on them. Data related to this use also affirmed findings from previous studies that highlighted the effectiveness of those tools in supporting students' learning. Regarding the factors behind this use, the study highlighted several ones, namely translation purposes and ease and speed to access information. For the challenges that arose while using, they can be divided into external, such as limited or unreliable internet access which falls under technical problems, and internal, such as the level mismatch between personal proficiency in English and AI applications provided responses. Nevertheless, the study documented catering for personal learning needs, improving English proficiency, saving time and energy, and access to smarter learning systems as some of the common personal gains students had from using those tools and applications in the context of English language learning. Finally, this study contributes to the emerging discourse on AI utilization in English language education by vocational students both at the level of national and international contexts, and provides valuable insights for future research.

7. Limitations and Recommendations

Although the findings of the study are informative, they should be understood within the context of the study's limitations, which may influence their interpretation and generalizability. On that account, future studies that target a similar population should employ larger and more diverse samples. Moreover, additional research that focuses on each of the investigated aspects separately is encouraged to build on these findings and provide more depth in order to support and enhance students' learning experiences, with particular emphasis on EFL education in vocational institutions. This holds particularly true in the case of the integration of AI into vocational training because it is regarded as a crucial step towards the training of an 'adaptable' future workforce (Ejjami, 2024b). Overall, the identified limitations and the offered recommendations can pave the way for refining future studies and enhancing their impact.

Disclosure Statement

The authors declare that there is no conflict of interest regarding the publication of this article. No financial, personal, or professional relationships have influenced the research, analysis, or conclusions presented in this work.

Notes on Contributors

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Appendix A: Questionnaire in English

This questionnaire aims to study the experience of learning English among trainees at vocational training institutions. Please be assured that the information and answers you provide will be used for academic purposes only. Thank you very much for your cooperation.

Instructions: Please tick the appropriate answer.

Section One: Background Information

1. **Gender:** **Female** ☐ **Male** ☐
2. **Age:**

Below 16 ☐ 16-20 ☐ 21-25 ☐ Over 25 ☐

3. **What was your academic level before starting vocational training?** ……..
4. **What is your current major?** …….

Section Two: Experience of Learning English Through AI

1. **How often do you use AI tools or applications to support your English learning? <u>Select ONE answer only.</u>**

Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Always ☐

2. **What are the AI tools or applications you use most? Write their names.**
……
3. **How effective are artificial intelligence tools/applications in improving English language learning? <u>Select ONE answer only.</u>**

Not effective at all ☐ Somewhat effective ☐ Very effective ☐

4. **What are your reasons for using artificial intelligence tools and technologies in learning English? You may select more than one answer.**

Educational / professional needs	☐	Translation	☐	Lack of subject-specific knowledge	☐
Low level in English	☐	Personal interest and curiosity	☐	Ease of use	☐
Laziness	☐	Recommendation from others	☐	Cheating in exams	☐

5. **What challenges do you face when using artificial intelligence tools and applications? You may select more than one answer.**

- Technical difficulties (e.g., compatibility issues, limited/unreliable internet access, system complexity, etc.) ☐
- Over-reliance on AI tools ☐
- Lack of technical support and proper training for effective use ☐
- Lack of technological skills and knowledge ☐
- Reduced critical thinking and problem-solving skills due to overuse of technology ☐
- Concerns about the accuracy and reliability of AI-generated language and information ☐
- Teacher disapproval

6. **What learning outcomes are enhanced by artificial intelligence technologies? You may select more than one answer.**

- Personalized learning ☐
- Intelligent tutoring systems ☐
- Improved accessibility ☐
- Smart feedback and assessment ☐
- Time and effort saving ☐

Appendix B: Questionnaire in Arabic

يهدف هذا الاستبيان إلى دراسة تجربة تعلم اللغة الإنجليزية لدى المتدربين على مستوى مؤسسات التكوين المهني. الرجاء التأكد أنه سيتم استخدام المعلومات والإجابات التى ستقدمها للأغراض الأكاديمية فقط. شكرا جزيلا لتعاونكم.

التعليمات: يرجى وضع علامة في الإجابة المناسبة.

المحور الأول: معلومات أساسية

1. **الجنس:** ☐ أنثى ☐ ذكر
2. **العمر:**

☐ أقل من 16 ☐ 16-20 ☐ 21-25 ☐ أكبر من 25

3. **مستواك الدراسي قبل ولوج التكوين المهني: .....**
4. **ما هو تخصصك؟ .....**

المحور الثاني: تجربة تعلم اللغة الإنجليزية باستعمال الذكاء الإصطناعي

1. **ما مدى استخدامك لأدوات أو تطبيقات الذكاء الاصطناعي لدعم تعلم اللغة الإنجليزية؟ <u>اختر إجابة واحدة فقط</u>**

☐ دائما ☐ غالبا ☐ أحيانا ☐ نادرا ☐ أبدا

2. **ما هي أدوات أو تطبيقات الذكاء الاصطناعي التي تستخدمها غالبًا؟ اكتب اسمهم**

.....

3. **ما مدى فعالية أدوات/تطبيقات الذكاء الاصطناعي في تحسين تعلم اللغة الإنجليزية؟ <u>اختر إجابة واحدة فقط</u>**

☐ فعالة جدا ☐ فعالة إلى حد ما ☐ ليست فعالة على الإطلاق

4. **ما هي أسبابك وراء استخدام أدوات وتقنيات الذكاء الاصطناعي في تعلم اللغة الإنجليزية؟ <u>يمكنك اختيار أكثر من إجابة واحدة</u>**

- ☐ الاحتياجات التعليمية / المهنية ☐ الترجمة ☐ ضعف المعرفة الموضعية
- ☐ مستوى منخفض في اللغة الإنجليزية ☐ الاهتمام الشخصي والفضول ☐ الراحة في الاستخدام
- ☐ الكسل ☐ توصية من الآخرين ☐ الغش في الامتحانات

5. **ما هي بعض التحديات التي تواجهك عند استخدام أدوات وتطبيقات الذكاء الاصطناعي؟ <u>يمكنك اختيار أكثر من إجابة واحدة</u>**

- ☐ الصعوبات التقنية (مثل مشكلات التوافق، والوصول المحدود/غير الموثوق إلى الإنترنت، وتعقيد الأنظمة، وما إلى ذلك)
- ☐ الاعتماد المفرط ☐ نقص الدعم الفني والتدريب المناسب للاستخدام الفعال
- ☐ نقص المهارات والمعرفة التكنولوجية
- ☐ انخفاض في التفكير النقدي ومهارات حل المشكلات بسبب الاعتماد المفرط على التكنولوجيا.
- ☐ مخاوف بشأن دقة وموثوقية اللغة والمعلومات التي تم إنشاؤها ☐ عدم موافقة المعلم

6. **ما هي نتائج التعلم التي تعززها تقنيات الذكاء الاصطناعي؟ <u>يمكنك اختيار أكثر من إجابة واحدة</u>**

- ☐ التعلم الشخصي
- ☐ أنظمة التدريس الذكية
- ☐ إمكانية الوصول المحسنة
- ☐ ردود الفعل والتقييم الذكي
- ☐ توفير الوقت والطاقة