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USING ARTIFICIAL INTELLIGENCE TO DEVELOP STUDENTS' HARD AND SOFT SKILLS IN THE EFL CLASSROOM

Hicham Rahate Ellah[i]
Cadi Ayyad University,
Faculty of Letters and Human Sciences,
Marrakech, Morocco

Abstract:
Integrating Artificial Intelligence (AI) into education has become very important and urgent. Many teachers use AI to enhance students' language skills. Research confirms that AI-powered tools help students develop hard skills and soft skills such as communication, collaboration, problem-solving, and critical thinking in the EFL classroom. In the Moroccan context, EFL learners face challenges not only in acquiring English language skills but also in building essential soft skills. This study explores the usefulness of AI-based tools in fostering these hard and soft skills within Moroccan EFL classrooms. This study uses a quantitative approach through an experiment that involves an experimental group and a control group. The results show that AI-assisted learning environments can significantly support the development of students' English language proficiency and soft skills, particularly in communication, teamwork, critical thinking, and problem solving. The findings highlight both the potential and limitations of AI in EFL classrooms, emphasizing the need for appropriate technology, effective training, and curriculum adjustments. Finally, this study offers recommendations for teachers, education policymakers, and researchers to facilitate the successful integration of AI into EFL instruction across Morocco, helping students transition more smoothly to higher education and better preparing them for future challenges.

Keywords: microteaching, speaking skills, pre-service teachers, reflective practice

1. Introduction

Teaching and learning English in Moroccan schools has gained significant attention as the need for global communication skills grows. Additionally, English is the most widely spoken language in the world. However, in EFL classrooms, the focus is still on equipping students with technical skills like grammar and vocabulary, and preparing them for national exams. Meanwhile, teachers give less attention to improving students'

[i] Correspondence: email h.rahateellah.ced@uca.ac.ma

soft skills alongside their language skills. In reality, the EFL environment has proven its effectiveness in nurturing both hard and soft skills (Rahateellah & Azmi, 2024). Soft skills such as communication, collaboration, critical thinking, and problem-solving are crucial in digital citizenship, the labor market, and higher education. Thus, any future reform should take into consideration the usefulness of soft skills for future graduates.

To modernize and improve teaching and learning practices in Moroccan schools, teachers, inspectors, and education policymakers should actively encourage the use of AI-based tools in EFL classrooms. The National Digital Strategy (2020–2025) emphasizes the urgent need to incorporate new technologies, including AI, to reform teaching and learning throughout the country. Despite this ambitious government policy, the current use of AI tools in Moroccan classrooms remains limited. Moreover, there are few empirical studies investigating how often teachers use AI tools and their impact on developing students' hard and soft skills. Therefore, this study aims to explore the extent to which these tools enhance students' language skills and soft skills in the EFL classroom. This study focuses on real classroom interventions using accessible AI-assisted tools such as Grammarly, QuillBot, and Chatbots, and assesses their benefits in the EFL learning environment, gathering authentic quantitative data.

2. Literature Review

2.1 The Importance of Hard and Soft Skills in the EFL Learning Environment

Both hard and soft skills are essential for students. Research has revealed that much attention and importance are given to technical skills (Rahateellah & Azmi, 2024). However, nowadays, soft skills have become increasingly important in education. Moreover, these skills are highly recognized and in demand in the job market. These skills include interpersonal and cognitive abilities that help students succeed socially, academically, and professionally. In EFL classrooms, students can develop both English language skills and soft skills using various approaches and tools. Moroccan students need to build these skills to integrate smoothly into a multilingual environment that requires adaptability and cross-cultural awareness. Despite their significance, traditional Moroccan EFL teaching still emphasizes techniques like repetition, memorization, and grammar drills, with few or no communicative or teamwork activities (Rahateellah & Azmi, 2025). As a result, many graduates improve their reading and writing skills but have limited communication skills or readiness for the labor market (Rahateellah & Azmi, 2024).

2.2 AI Use in Education

The educational systems in most countries have witnessed a radical change by adopting new teaching and learning methods that advocate for AI tools. The use of AI-powered tools in education marks a transformative shift in how teaching and learning processes are designed and delivered. Zawacki-Richter *et al.* (2019) said that Artificial Intelligence is increasingly integrated into educational systems through smart teaching programs,

adaptive learning platforms, automated assessment, and natural language processing applications like Chatbots. These tools give a motivating and personalized learning experience by analyzing student data and adapting content in real time to meet students' learning needs. For example, platforms like Carnegie Learning and Century Tech use AI algorithms to assess student development and provide relevant feedback. These tools offer promising outcomes. They help teachers attractively deliver content. In other words, they foster student-centered instruction.

Although the use of AI-powered tools in education has promising outcomes, their integration raises issues and concerns regarding equity, privacy, and the role of human teachers. In other words, AI can improve accessibility by supporting students with diverse needs through speech apps and translation tools. However, there is a risk that excessive dependence on AI may worsen educational inequalities if access is limited to schools with advanced resources (Holmes *et al.*, 2022). Additionally, ethical issues related to data privacy and algorithmic bias require strong monitoring frameworks to ensure AI systems are transparent and accountable. Nonetheless, the trend indicates that AI will continue to develop as a valuable complement to traditional educational methods, providing innovative ways to improve learning and teaching across various settings. Teachers use AI tools that are approved globally to facilitate both skill acquisition and autonomous learning. These tools can offer instant and personalized feedback, simulate real-world situations, adjust to students' needs, and track their development through time.

2.3 Soft Skills Development Using AI in the EFL

The incorporation of AI tools into EFL classrooms has radically changed how students interact with language materials and improve essential skills. Research has confirmed that AI-powered tools such as ChatGPT, Grammarly, and other technologies assist learners by providing them with instant feedback and encouraging them to learn language skills efficiently and attractively. In the Moroccan context, Azennoud (2024) conducted an empirical study on Moroccan university students to explore how AI-powered tools can significantly enhance students' language skills and academic writing. The results of this study confirmed that AI-powered tools had a great impact on students' performance. These outcomes align with the findings of Zawacki-Richter *et al.* (2019), who discovered that AI promotes student autonomy and metacognitive regulation. Thus, as Moroccan students increasingly engage with AI outside the classroom, the potential for blended, EdTech-enhanced language learning continues to grow (Azennoud, 2024; Zawacki-Richter *et al.*, 2019).

2.4 Moroccan Teachers' Perceptions toward AI Use

According to many previous studies about the integration of EdTech in the EFL classroom, a large proportion confirmed the great results of this integration (Rahateellah & Azmi, 2024). In this regard, many teachers hold positive attitudes toward AI-generated content. According to a study by Dahia (2023) involving high school teachers in Taourirt

revealed that 78% believed AI content improved learner engagement and lesson planning efficiency. However, these teachers raised some concerns about cultural mismatches and the overuse of AI potentially stifling critical thinking (Dahia, 2024). Likewise, Bekou (2024) argues that though Moroccan teachers acknowledge the pedagogical importance and value of AI, they need clearer guidelines on ethical and pedagogical incorporation. These findings raise many worldwide issues and debates about the use of AI in education, which highlight the requirement for localized, culturally sensitive applications of technology (Holmes *et al.*, 2022).

2.5 Soft Skills in Moroccan EFL Classroom

Besides developing students' language skills in the EFLL classroom, students are also required to develop some soft skills, such as communication, teamwork, and analytical skills. These skills are highly demanded in the labor market. Rahateellah and Azmi 2024 confirmed that the EFL classroom permits the development of students' soft skills. Rahateellah (2025) and Aziz et al., (2023) revealed that project-based learning and debates were significantly effective in enhancing students' communication, teamwork, problem-solving, critical thinking, and leadership skills. Combining both the conventional learning environment and AI-enhanced learning can augment student engagement and learning. Likewise, Elouardi (2024) argues that extracurricular activities such as clubs, cultural festivals, and student-led workshops are essential for nurturing collaboration and emotional intelligence. This is especially relevant, as the Moroccan educational system meets the global labor market's demands for both linguistic and soft skills.

2.6 Opportunities and Challenges for AI in Soft Skills Development

Even while AI-powered technologies are successful in helping students acquire soft skills, there are still certain issues in the Moroccan educational system. According to research by Rahateellah and Azmi (2024), just 26% of surveyed teachers integrate soft-skills training into formal education, indicating that many EFL teachers acknowledge the value of soft skills but lack experience in formally teaching or assessing them. AI does present potential for advancement, though, since intelligent systems can promote teamwork through collaborative platforms, mimic interviews, and facilitate peer assessments. The future of AI-enhanced education is bright, provided that it is combined with teacher preparation and equal infrastructure, as national initiatives like Digital Morocco 2030 seek to close the digital gap (Ministry of Digital Transition, 2023; Rahateellah and Azmi, 2024).

While AI is well known for improving technical abilities and knowledge retention, new research (e.g., Kukulska-Hulme, 2020; Holmes *et al.*, 2019) indicates that it can also promote soft skills. Intelligent writing assistants help with clarity and expression, conversational AI improves speaking fluency and active listening, and virtual reality builds cultural competency and public speaking skills. There have not been many empirical investigations done in Morocco. A systematic integration of AI for the development of soft skills in EFL is still understudied, despite certain pilot programs

(such as the British Council's digital learning initiatives) suggesting promising results. Therefore, the purpose of this study is to investigate the benefits of AI-based tools in developing these hard and soft skills in Moroccan high school EFL classrooms as well as the difficulties associated with their integration.

3. Research Methodology

3.1 Research Design

This study used a quantitative approach, gathering quantitative data through an experiment. This method allowed for a comprehensive understanding of how AI-powered tools affect students' development of both linguistic skills and soft skills. The experiment collected data from approximately 71 high school students across two second-year baccalaureate classes. Both classes were tested before and after the intervention in their English language skills and soft skills. The post-test scores helped determine whether AI-powered tools have a significant effect on students' achievement in terms of English language proficiency and soft skills.

This study aims to confirm or refute the null hypotheses below:

1) There is no significant difference in English language proficiency between students who learned English using AI-powered tools and those who learned English in a conventional learning environment.
2) There is no substantial difference in soft skills development between students who learnt English using AI-powered tools and those who learnt English in a traditional learning setting.

3.2 Participants and Setting

This study employs a quantitative approach to investigate the impact of AI-powered tools in EFL classrooms on students' hard and soft skill development. The quantitative data were collected through a field experiment. The experiment took place at a public high school. It consisted of an experimental group (36 students) and a control group (35 students). The students were at the second-year baccalaureate level. They were of mixed gender. The experimental group had access to AI-powered tools in their English classes, whereas the control group did not.

3.2 Data Collection Tools and Procedures

The main data of this study were gathered through an experiment. In the experiment, the pre- and post-tests assessed soft skills using a 5-point Likert scale. They are scored out of 40 points. Besides, an English language test was used before and after the experiment to assess students' improvement in English language proficiency. It is scored on 20/20. This test was intended to identify whether AI-powered tools helped the experimental students to improve their English language proficiency. The experiment lasted 8 weeks, and students completed tasks such as practicing job interviews with Chatbots, writing argumentative essays with AI writing assistants, and engaging in peer-reviewed

discussions enhanced with AI moderation. Students took a pre-test and post-test of soft skills in order to determine if the use of AI-powered tools helps students of the experimental group to develop their soft skills better than the control group.

4. Results and Discussion

The results obtained from this study are discussed in the sections below.

Section 1: Students' Improvement of English Language Proficiency

Quantitative data from the students' pre-tests and post-tests were analyzed using descriptive and inferential statistics (Independent Samples T-Test) to examine the impact of AI-powered tools on students' improvement in soft skills and English language proficiency. This study includes 71 students from a public high school in an urban area, consisting of 2nd-year baccalaureate students. These students study English three hours a week and have experience completing class projects. They also studied information technology in their first year of secondary school. The section below shows the demographics of the experimental group and the control group.

4.1 Demographic Variables

Table 1: The Demographic Variables of the Experimental Group

Variables	Types of information requested	Percentage (%)
Male students	17	47.22
Female students	19	52.78
Age	Less than 18 years old (29)	80.55
	Above 18 years old (7)	19.45
Grade	2nd year Baccalaureate	100.00

Based on the outcomes of the participants' demographics in the experimental group, about 47.22% of participants are male students, and about 52.78% are female students. Regarding the participants' age, about 80.55% are less than 18 years old, while about 19.45% are above 18 years old. As for their school grade, they are all second-year baccalaureate.

Table 2: The Demographic Variables of the Control Group

Variables	Types of information requested	Percentage (%)
Male students	19	54.28
Female students	16	45.72
Age	Less than 18 years old (31)	88.57
	Above 18 years old (4)	11.43
Grade	2nd year Baccalaureate	100.00

Based on the outcomes of the participants' demographics in the control group, about 54.28% of participants are male students, and about 45.72% are female students. Regarding the participants' age, about 88.57% are less than 18 years old, while about 11.43% are above 18 years old. As for their school grade, they are all second-year baccalaureate.

4.2 Comparison of the Experimental Group and the Control Group on the Pre-test of English Language Proficiency

During the experiment, the students of the experimental and control groups took a pre-test of English language proficiency. This test aims to determine their English language level before entering the experiment. It covers comprehension skills, vocabulary, grammar, function, and writing skills. After collecting data from the pre-test of the English, an independent samples t-test was used. Both descriptive and inferential statistics were used in the analysis of data. Table 3 below illustrates the groups' statistics.

Table 3: Groups' Statistics

Test	Groups	N	Mean	Std. Deviation	Std. Error Mean
Pre-test scores of English	Experimental group	36	10,3611	2,77903	,46317
	Control group	35	10,0286	2,72770	,46107

According to the group statistics in Table 3 above, it is remarked that there are two groups: the experimental group and the control group. In the experimental group, there are 36 students. The mean score of students of the experimental group is 10.36, the standard deviation is 2,77903 and the standard error mean is 46317. In the control group, there are 35 students too. Their mean score is 10,0286, the standard deviation is 2,72770, and the standard error mean is 46107. It can be observed that the performance of both groups is almost identical before entering the experiment. However, to base this finding on strong research evidence, an independent samples t-test is used. This parametric test evaluates if the mean value of the English language pre-test for the experimental group differs significantly from the mean value of the pre-test of the English language of the control group. Table 4 illustrates the outcomes from the t-test.

Table 4: T-test Conducted on the Experimental Group and the Control Group for Pre-assessment of the English Language Proficiency

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-test scores	Equal variances assumed	,005	,942	,509	69	,613	,33254	,65371	-,97158	1,63666
	Equal variances not assumed.			,509	68,993	,612	,33254	,65354	-,97123	1,63631

4.2.1 Result

Based on the findings of the t-test for equality of means above, it can be confirmed that the difference between the means for both groups is 33254. The t-statistic for equal variances is 942. The degree of freedom is 69. The p-value is higher than the pre-specified alpha level (0.05). Henceforth, the p-value for the difference between the control group and the experimental group is more than 0.05 (0.613≥ 0.05). It can be established that there is no statistically significant difference between the control group students and the experimental group students in terms of overall English language proficiency at pre-assessment. Consequently, the performance of the experimental and the control groups is identical before entering the experiment. Figure 1 below illustrates the difference between the two groups.

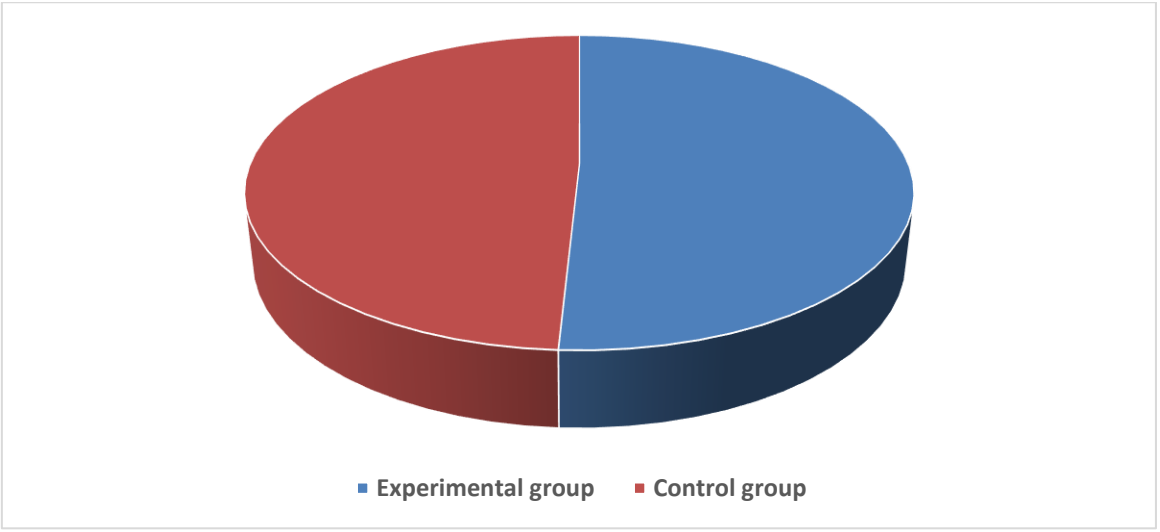


Figure 1: The experimental and control groups' performance on the pre-test of the English language

4.3 Comparison of the Experimental Group and the Control Group on the Post-test of English Language Proficiency

After confirming that the difference between the experimental group students and the control group students on the pre-test of English language proficiency is not significant before entering the experiment, the focus now is to investigate the extent to which the use of AI-powered tools in the EFL classroom enables high school students to develop their English language skills.

Table 5: Groups' Statistics

	Groups	N	Mean	Std. Deviation	Std. Error Mean
Post-test scores of English	Experimental group	36	13,4722	2,00693	,33449
	Control group	35	10,2286	1,68184	,28428

Based on the group statistics in Table 5 above, it is observed that the mean score of students of the experimental group is 13.47, the standard deviation is 2,00693 and the standard error mean is .33449. The mean score of the control group is 10, 22, the standard deviation is 1, 68184, and the standard error mean is .28428. It can be observed that the performance of both groups differs after the experiment. However, to base this finding on strong research evidence, an independent samples t-test is used. Table 6 below illustrates the outcomes from the t-test.

Table 6: T-test Conducted on the Experimental Group and the Control Group for Post-assessment of the English Language Proficiency

		Levene's Test for Equality of Variances		T-Test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-tests scores	Equal variances assumed	,575	,451	7,371	69	,000	3,24365	,44007	2,36573	4,12157
	Equal variances not assumed.			7,389	67,546	,000	3,24365	,43897	2,36758	4,11972

4.3.1 Result

According to the outcomes of the t-test above, the significant p-value of the t (2-tailed) is .000. This value is lower than 0.05 (.000 < 0.05), which means that there is a statistically significant difference between the experimental group students and the control group students on the post-test of the English language proficiency. In other words, the students who used AI-powered tools enhanced their English language skills better than those who learned the English language in a conventional environment. Thus, AI-powered tools are more effective in developing students' English language skills than conventional

teaching and learning methods. Figure 2 below illustrates the difference between the experimental group and the control group on the post-test of the English language proficiency.

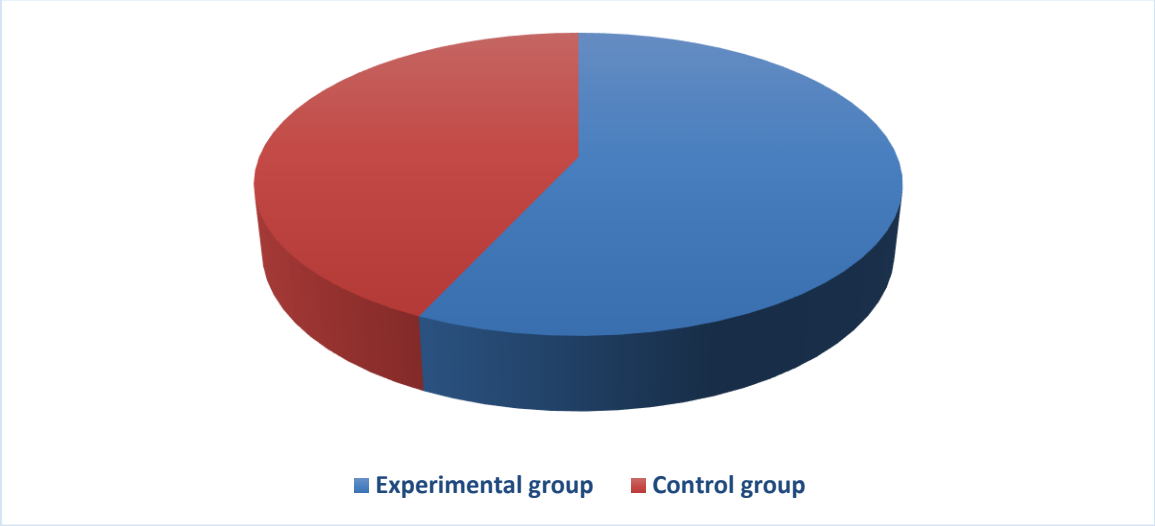


Figure 2: The Experimental and Control Groups' Performance on the Post-test of the English Language

4.4 Hypothesis Testing

As mentioned earlier in this study, the main objective is to investigate the extent to which the use of AI-powered tools in the EFL classroom enables high school students to develop their English language proficiency and soft skills. Hypothesis testing is used to determine the results of the experiment. The null (H0) hypothesis states that there is no significant difference in English language proficiency between students who learned English using AI-powered tools and those who learned English in a conventional learning environment.

To test this hypothesis, a 95% confidence level and an alpha level (α) of 0.05 were selected. This is done through the steps described below:

To reject or confirm the hypothesis above, the results of the independent samples t-test are evaluated against the assumptions illustrated below:

- If Sig. (2-tailed) > 0.05 at a 5% significance level, the null hypothesis (H0) is accepted, and the alternative hypothesis (H1) is rejected. In other words, there is no substantial effect of using AI-powered tools on students' English language proficiency development in the EFL classroom.
- If Sig. (2-tailed) < 0.05 at a 5% significance level, the null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. In other words, there is a significant effect of the use of AI-powered tools on the development of students' English language proficiency in the EFL classroom.

According to the outcomes of the independent samples t-test, there is a substantial difference between the experimental group students and the control group students on the post-test of English language proficiency. The results obtained show that the Sig. (2-

tailed) is lower than 0.05 (0.00 < 0.05). In other words, the null hypothesis is rejected, and the alternative one is accepted.

4.5 Summary

To conclude, the results of the independent samples t-test confirm that the use of AI-powered tools in the EFL classroom permits students to develop their English language skills. In other words, the experimental group students outperformed the control group students in terms of English language achievement. Therefore, the use of AI-powered tools can become an effective strategy for teaching and learning English. This result is consistent with the findings of previous research, which confirmed that English language development through AI-powered tools is possible (Azmi, 2017; Rahateellah & Azmi, 2024; Aziz et al. 2023).

The next section is going to examine whether there is any research evidence that the use of AI-powered tools can help students develop their key soft skills in the EFL classroom.

- **Section 2: Students' Improvement of Soft Skills**

During the experiment, the students of the experimental group were allowed to use different AI tools in their study and project work, whereas the control group students did not have access to these tools. Both groups were tested before and after the experiment to determine if the use of AI tools has any positive effect on students' soft skills improvement.

4.6 Comparison of the Experimental Group and the Control Group on the Pre-test of Soft Skills

Table 7: Groups' Statistics

Group statistics					
	Groups	**N**	**Mean**	**Std. Deviation**	**Std. Error Mean**
Pre-test of soft skills	Experimental group	36	19,0278	4,34568	,72428
	Control group	35	18,3143	3,72410	,62949

According to the groups' statistics in Table 7 above, there are two groups: the experimental group and the control group. In the experimental group, there are 36 students. The mean score of the experimental group is 19.02, the standard deviation is 4,34568, and the standard error of the mean is 72428. In the control group, there are 35 students as well. Their mean score is 18, 31, the standard deviation is 3, 72410, and the standard error of the mean is 62949. It appears that the performance of both groups is almost identical before entering the experiment. However, to base this finding on strong research evidence, an independent samples t-test is used. This parametric test evaluates whether the mean pre-test score for soft skills in the experimental group differs

significantly from the mean pre-test score for the control group. Table 8 illustrates the results of the t-test.

Table 8: T-test Conducted on the Experimental Group and the Control Group for the Pre-assessment of Soft Skills

		Levene's Test for Equality of Variances		T-Test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Pre-test of soft skills	Equal variances assumed	1,287	,260	,742	69	,461	,71349	,96170	-1,20505	2,63204
	Equal variances not assumed.			,744	67,940	,460	,71349	,95960	-1,20139	2,62838

4.6.1 Result

Based on the t-test for equality of means above, the difference between the means of the two groups is 71349. The t-statistic for equal variances is 742. The degrees of freedom are 69. The p-value is higher than the pre-specified alpha level (0.05). Thus, the p-value for the difference between the control group and the experimental group is greater than 0.05 ($0.461 \geq 0.05$). It can be confirmed that there is no statistically significant difference between the control group students and the experimental group students in terms of overall soft skills level at pre-assessment. Figure 3 below illustrates the difference between the two groups.

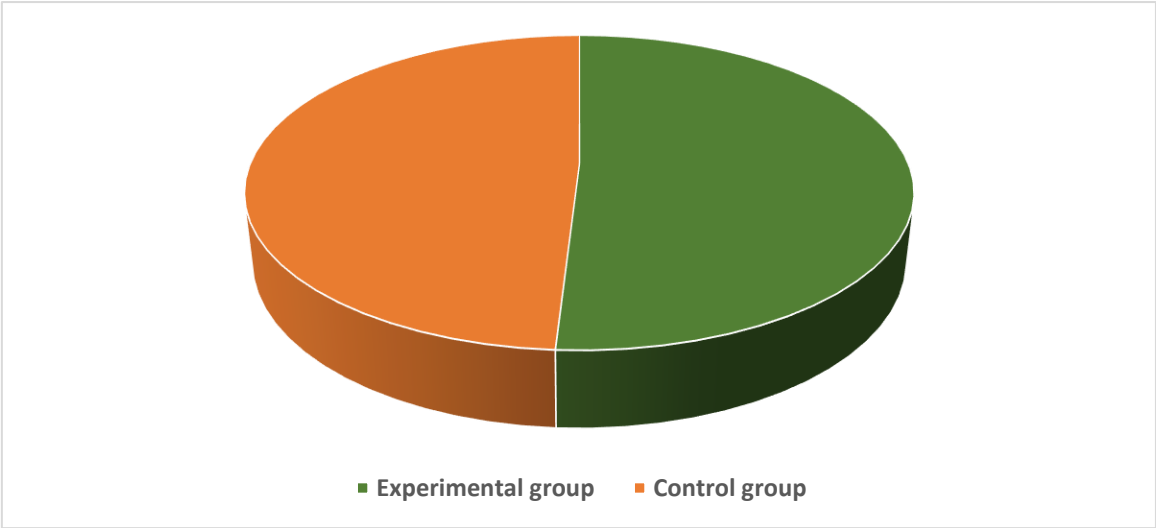


Figure 3: The Experimental and Control Groups' Performance on the Pre-test of Soft Skills

4.7 Comparison of the experimental group and the control group in the post-test of soft skills

The results of the pre-test of soft skills indicate that the difference between the experimental group students' and the control group students' performance is not significant. The section below focuses on investigating whether the use of AI-powered tools in the EFL classroom has any significant effect on students' soft skills development.

Table 9: Group Statistics

	Goups	N	Mean	Std. Deviation	Std. Error Mean
Post-test scores of soft skills	Experimental group	36	23,7778	4,46645	,74441
	Control group	35	19,4286	2,85210	,48209

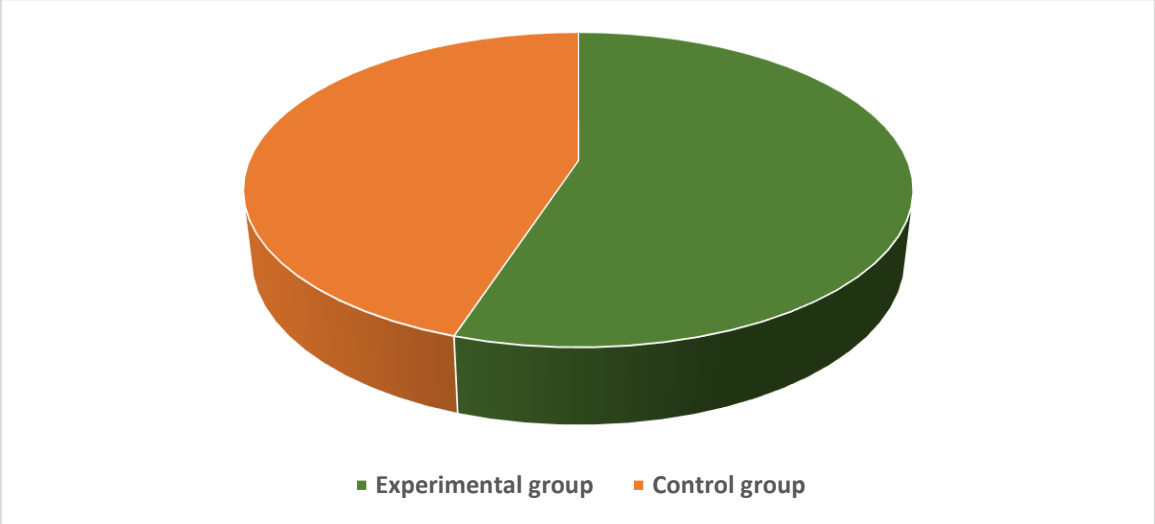
According to the group statistics in Table 9 above, it is noticed that the mean score of students of the experimental group is 23, 77, the standard deviation is 4, 46645 and the standard error mean is 74441. The mean score of the control group is 19, 42, the standard deviation is 2, 85210, and the standard error mean is 48209. These outcomes reveal that the performance of both groups differs after the experiment. However, an independent samples t-test is used to determine the result. Table 10 below illustrates the outcomes from the t-test.

Table 10: T-test Conducted on the Experimental Group and the Control Group for Post-assessment of Soft Skills

		Levene's Test for Equality of Variances		T-Test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Post-test of soft skills	Equal variances assumed	5,653	,020	4,875	69	,000	4,34921	,89223	2,56926	6,12915
	Equal variances not assumed.			4,904	59,704	,000	4,34921	,88688	2,57500	6,12341

Based on the t-test findings above, the t-test (2-tailed) has a significant p-value of .000. This value is lower than 0.05 (.000 < 0.05), indicating a statistically significant difference between the experimental group and the control group on the post-test of soft skills. In other words, students who used AI-powered tools improved their soft skills better than those who did not use these tools. This suggests that AI-powered tools are more effective than conventional teaching and learning methods in developing students' soft skills and English language proficiency. Figure 4 below displays the difference between the experimental group and the control group on the post-test of soft skills.

Figure 4: The Experimental and Control Groups' Performance on the Post-test of Soft Skills



4.8 Hypothesis Testing

The main purpose of this study is to investigate the extent to which the use of AI-powered tools in the EFL classroom enables students to improve their English language proficiency and their soft skills. Hypothesis testing is used to determine the results of the experiment. The null (H0) hypothesis states that there is no substantial difference in soft skills development between students who learned English using AI-powered tools and those who learned English in a traditional learning setting.

To test this hypothesis, a confidence level of 95% and an alpha level (α) of .05 were selected. This is done through the steps and assumptions described below:

- If Sig. (2-tailed) > 0.05 at a 5% significance level, the null hypothesis (H0) is accepted, and the alternative hypothesis (H1) is rejected. In other words, there is no substantial effect of using AI-powered tools on students' soft skills development in the EFL classroom.
- If Sig. (2-tailed) < 0.05 at a 5% significance level, the null hypothesis (H0) is rejected, and the alternative hypothesis (H1) is accepted. In other words, there is a significant effect of the use of AI-powered tools on the development of students' soft skills in the EFL classroom.

According to the outcomes of the inferential statistics (T-test), it can be confirmed that there is a substantial difference between the experimental group students and the control group students on the post-test of soft skills. The results obtained show that the Sig. (2-tailed) is lower than 0.05 (0.00 < 0.05). In other words, the null hypothesis is rejected, and the alternative one is accepted.

4.9 Summary

To sum up, the results of the independent samples t-test confirm that the use of AI-powered tools in the EFL classroom enables students to develop their soft skills. In other words, students in the experimental group outperformed those in the control group in soft skills development. Hence, the use of AI-powered tools can be effective in developing

students' key soft skills in the EFL classroom. This outcome aligns with previous research, which confirmed that the development of soft skills in the EFL classroom through AI-powered tools is possible (Azmi, 2017; Rahateellah & Azim, 2024; Zawacki-Richter *et al.*, 2019; Holmes *et al.*, 2022).

5. Conclusion

Briefly, the incorporation of AI tools into Moroccan EFL classrooms demonstrates significant potential to develop students' English language skills and soft skills. Thus, digital learning can be highly effective when used properly in schools. The use of AI tools enables students to speak and write English fluently and correctly. It also helps them become confident communicators, creative thinkers, future leaders, and adaptable learners. However, teachers should receive adequate training on how to implement AI tools in the classroom appropriately.

6. Recommendations

This study makes some theoretical and practical recommendations for teachers and school directors, for education policy makers and researchers. First, teachers need to integrate AI- enhanced tools in their speaking and writing skills. They can also cooperate with teachers worldwide. Besides, they can encourage their students to make use of the good side of technology. Second, policymakers should equip schools in rural and urban areas with good education technology to ensure equitable access. They can also make clear pedagogical guidelines for teachers and organize regular training sessions. Finally, researchers can further study the influence of AI on students' education and behavior. They can also develop new teaching methods with the help of inspectors.

Conflict of Interest Statement
The author declares no conflicts of interest.

About the Author(s)

My name is Hicham Rahate Ellah, and I am a teacher of English with a PhD in Applied Linguistics, specializing in soft skills development. Throughout my academic and professional career, I have been deeply interested in the integration of soft skills in the EFL (English as a Foreign Language) classroom. My research focuses on how communication, collaboration, critical thinking, and other essential soft skills can enhance students' learning experiences and academic success. I have conducted several research studies on students' soft skills development in EFL contexts, and many of my articles have been published in indexed international journals. These publications are also available on ResearchGate, where they can be accessed by researchers and educators worldwide. I have actively participated in numerous national and international conferences, where I presented papers, exchanged ideas with scholars, and contributed to discussions related to language education. I am passionate about teaching, research, and continuous professional development, and I always strive to promote innovative and learner-centered approaches in education.

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