

# Perceptions of Kurdish EFL University Students and Instructors on the Role of Educational Environment and Technological Tools in Writing Proficiency

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**Abstract**—Writing is a central skill in English as a foreign language (EFL) education, though it remains one of the challenging skills for learners, including Kurdish EFL students. Writing demands proficiency in language, vocabulary, grammar, and an ability to organize ideas cohesively. Today, due to the rapid integration of educational digital tools to classrooms and growing concern to classroom environment, various studies are conducted in this area reshaped writing pedagogy in different parts of the world; yet conducting an empirical study that addresses the significance role of these educational and technological factors in Kurdish EFL writing remains unexplored.

Therefore, the current study endeavors to fill this gap, which aims to identify how Kurdish EFL university students and university lecturers perceive the role of educational environment and technological tools in Kurdish EFL students' writing skill. Therefore, A mixed-method; quantitative and qualitative methodology was employed, incorporating both a Likert Scale questionnaire and a semi-structured interview as data collection tools. Based on SPSS software with some statistical techniques, the data were analyzed. The samples of 108 university students were involved in the questionnaire and 3 EFL instructors were interviewed, at university of Sulaimani, in Kurdistan Region of Iraq.

The findings uncover that educational environment and technological resources like grammar checkers, collaborative platforms, and writing apps were helpful tools in enhancing accuracy, motivation, and independence of the students; hence, contribute in Kurdish EFL University Students' writing proficiency.

It is concluded that both supportive classroom environment with suitable technological resources can improve the writing proficiency of Kurdish EFL university students. All these results provide important insights for EFL teaching in the Kurdistan Region.

**Index Terms**—educational environment, technological tools, EFL students, perceptions, writing proficiency

## I. INTRODUCTION

Language skills are classified into receptive skills and productive skills. Receptive skills include listening and reading which demand achieving knowledge, also known as passive skills.,while productive skills, also known as active skills,

include speaking and writing, language users need to create words, phrases, sentences, and paragraphs to communicate their ideas either in speech or text.

All four language skills are inter-related and are supporting each other in the same way (Sreena and Ilankumaran, 2018; Ali, 2023).

For Kemalsyah, Solehuddi, Hariyadi, Jenuri, and Suwama (2022) and Abdurakhmonova (2023) writing is a productive skill used to convey thoughts, opinions, and messages. It is also a crucial means of self-expression, information gathering, communication, and critical thinking. Byrne (1988) considers that since writing is intended for the reader, writers must ensure clarity and explicitness of their writing to communicate successfully with their readers through the written medium.

Writing has a vital role in the learning process. Ali (2003) considers writing as a crucial skill in language learning that plays a significant role in education and professional settings. as for Selvaraj and Aziz (2019), this skill encourages creativity, imagination, and understanding, because writers, in order to put their thoughts in words, they have to imagine and be creative. Concerning its role in a second and foreign language learning, Afsaw (2019) believes that writing can be used as a learning channel of a second or foreign language learning, and there is a tight relationship between learning to write and developing one's foreign language skills (Pathan, 2021). Thus, writing contributes to learners' social involvement and connects them to the world around them so that they are aware of many things (Fareed, Ashraf, and Bilal, 2016; Bhandari, 2024).

Thus and due to its significant role in language learning and education, exploring the factors that have a role in students' writing skills is important. Moreover, beside instructional choices, social context and interactions amongst students and teachers affect students' writing and reduce their stress of writing assignment as (Hyland ,2003) reports. Additionally, supportive psychological climate of the classrooms can promote students' motivation and encourage them feel safe psychologically to examine new ideas, and revise their negative beliefs on writing (Dörnyei, 2005). Other scholars like (Nabiryo and Sekiziyivu, 2019) observe that physical classroom environment also, influences writing instructions in different ways. Thus, different aspects of educational environment,

whether instructional, psychological, social, and physical shape students writing development.

On the other hand, technological tools, which are used in the field of teaching and learning writing, can be seen as a factor that influences writing skills that makes learners more engaged and creative while using technology (Lai, Do, and Le, 2022; and Sandolo, 2010)

Accordingly, the current study aims to explore the role of two factors in Kurdish EFL university students writing skill: educational environment and technological tools in writing skill

Therefore, the following research questions are raised to be answered:

1. To what extent do Kurdish EFL university students perceive their classroom environment as supportive in their writing?
2. How do Kurdish EFL university students perceive the role of technological tools in enhancing their writing?
3. How do university instructors view the contribution and the role of the both factors: educational environment and technological tools in Kurdish EFL university students' writing proficiency?

## II. LITERATURE REVIEW

In the literature, a substantiation body of research are conducted that highlight the role of different internal and external factors, more importantly the effect of the educational environment and technological tools on EFL writing performance, the following is an eye-birds view of a number of related works to the present study.

Luan (2024), explored the factors affected students' writing skill in English, entitled "*Exploration of Factors Causing Difficulties in Students' Writing Skills*". The samples of 110 students are involved, and questionnaire and classroom observations are employed as data collection tools. The research findings identified four groups of related factors on the students writing skills: student-related, teacher-related, educational-environment related and textbook related. Accordingly, the researcher suggested certain strategies in improving students' writing skills. Amongst them: appropriate teaching method, corrective and constructive feedback, and promoting good attitudes towards writing, and consistent writing practice.

Similarly, a descriptive study was conducted for the first-year BSED students' writing proficiencies in a Local College in Misamis Oriental by Vacalares *et al.* (2023), entitled "*Factors affecting the writing skills of the education students: A descriptive study*". Their participants were 50 randomly selective students who participated in a developed and modified survey questionnaire. Three basic results were exposed: first, motivation was considered to have crucial role in the writing skills, secondly, the environment was considered influential, since the provision of appropriate class atmosphere and thirdly, using grammar checker and automated feedback systems positively influenced students writing performance.

Additionally, Ghorbani, Jalalvandi, and Dowlatabadi (2020) analyzed and measured the psychological, environmental, personal and linguistic factors affecting students' writing skills

from the perspective of 265 teachers in Ark City using descriptive-survey and a standardized questionnaire, in a study entitled "*Investigating the Factors Affecting on Writing Skills of Students from the Teachers' Perspective*". The findings revealed the four factors were effective and influential in improving and developing students' writing proficiency.

In addition, a qualitative study by Chi, Thuy, and Ai (2024) investigated the factors contribute to students' difficulties in an academic writing course, in "*Exploring Factors Influencing Students' Challenges in Academic Writing: A Qualitative Analysis Based on Student Perspectives*". 25 students participated in an open-ended questionnaires and interview, in Hanoi. The results revealed internal and external factors as challenges affecting students' writing. The internal factors included self-motivation, self-confidence, lack of knowledge, and feeling of stress, while external ones consisted of the instructors' teaching style, instructional materials, environment of the classroom, and several aspects of the writing process.

On the influence and implementation a digital tool in improving Iranian EFL learners' writing skills, Ashrafganjoe (2025) conducted a study, entitled "*Exploring the Role of Digital Writing Tools in Enhancing Academic Writing Skills: The Case of the Hemingway App in EFL Classrooms*". A sample of 40 TEFL and English Translation students from Kerman Islamic Azad University were involved, and then divided into two groups; 20 students within an experimental group which received instruction using the Hemingway app, while the control group followed traditional instruction methods. Pre-test and post-test was the study tool, which was analyzed and evaluated by Split-Plot ANOVA (SPANOVA). The results uncovered that students' writing skills meaningfully developed in both groups (i.e.), with and without this tool in receiving instructions. While, the performance of experimental group exceeded to the control group, which indicated a great impact of the Hemingway app on students' writing, their self-efficacy and confidence, and their writing anxiety levels. These findings induce the educational importance of integrating digital tools into EFL writing.

Finally, Awla, Safar, Ade, and Abdullah (2023) involved thirty Iraqi EFL students as the sample in a study entitled, "*Investigation of the Impact of Technology on the Written Production of EFL Learners in Iraqi Kurdistan*" assessed the role of technology in writing, with a pre-test-post-test design. The participants answered a questionnaire and a descriptive writing task, and the results were analyzed statistically by SPSS program. The research findings indicated a significant difference between the pre-test and post-test results, which in turn revealed the importance of technology in developing the writing skills of Iraqi Kurd EFL learners.

It can be noticed that some of the above studies have been conducted to explore the factors that cause students' writing difficulties and discover for example environment, or use one tool in their research, or examine the impact of one digital tool on participants' writing skills.

In contrast to the above previous studies, this study explores the role of educational environment and technological tools in writing proficiency of Kurdish EFL university students at University of Sulaimani, which has not been conducted before in Kurdistan region and thus it fills a local gap, in which a mixed

method is used and a questionnaire for students with an interview for teachers.

### III. THEORETICAL FRAMEWORK

#### A. Writing Proficiency

Since writing is an important and complex skill, scholars define it differently. For Raimes (1983), writing is an ability or proficiency to express thoughts, feelings, and ideas organized in words, sentences, and paragraphs using eyes, brain, and hand. And also, she claims that when thinking and writings' relationship is close, the product of writing becomes valuable at any language course. While, Dragomir and Niculescu (2020) define writing as is a complex skill. Norhidayah, Amelia, and Hidayat (2021) are of the view that, the central aspect of human communication is writing. It is determined as a complex cognitive activity and also as the most challenging language skill for students. Because the writers are required to verify control of various variables in the sentence such as control of content, spelling, sentence structure, and connecting information to produce cohesive and coherent paragraph and text. While, Kemalsyah *et al.* (2022), and Ali (2023) view that, writing, amongst all four skills seems to be the hardest one compared to listening, speaking, and reading. Because writing does not only require arranging and communicating the ideas with cohesion but also needs capability in vocabulary, grammar and the language in general. Therefore, EFL learners might have struggles in writing skills, some of their challenges are explained in the following section.

##### 1) Common challenges faced by EFL students in writing

Generally, students face challenges during writing assignments in terms of time commitment, content development, depth of thought, and organization of ideas. Despite these complexities, EFL students also struggle with aspects such as word order, prepositions, articles, pronouns, and verb forms (Harrison, Challenger, Morgenstern, and Balarabe, 2024). Selvaraj and Aziz (2019), Kemalsyah *et al.* (2022), Ali (2023), and Chi *et al.* (2024) indicate that EFL students have different difficulties in writing skills that hinder their abilities to communicate effectively in written form, such as grammatical errors, sentence structure, mechanics (i.e. punctuation, capitalization, and spelling), selecting appropriate academic vocabularies or word choice, identifying suitable conjunctions, the transition from writing in their first language (L1) to the second language (L2), low level of motivation and confidence, insufficient proficiency in using conventions, cultural or linguistic problems, lack of knowledge in generating and organizing ideas, lack of teachers' pedagogical knowledge in writing, barriers with syntax, and idiomatic expressions, impacting the clarity and coherence of their writing.

On the level of linguistic errors of EFL learners, Sabir (2012) highlights the errors that Kurdish EFL learners make in their performance related to concord between sentence elements such as subject and verb, that without this sort of agreement, academic writing becomes erroneous.

In addition, Ibrahim and Hassan (2024) declare that the instructors' lack of professional development and use traditional

and ineffective instructional methods make challenges for students writing.

Another challenge is students' unfamiliarity to academic conventions such as citation styles, academic tone, and disciplinary norms. Moreover, Students have problems in engaging ideas, theories, and arguments critically, and analyzing, evaluating, and synthesizing information from several sources, which are required in academic writing. Students often afraid to be criticized and evaluated by teachers and peers can prevent students to express ideas freely in writing (Chi *et al.*, 2024).

According to literature, the difficulties in academic writing are multifaceted and involve linguistic, cognitive, affective, and contextual dimensions. Students have to develop a range of skills including, language proficiency, critical thinking, research proficiency, and self-efficacy in writing to overcome these challenges.

#### B. Educational Environment

Educational environment refers to an educational approach, cultural context, or physical setting in which teaching and learning occurs. The term is commonly used as an alternative to classroom. Educational environment should prepare a safe and conducive space for learning, and also encourage learners to interact with each other and access resources that help them learn in different ways (Williams and Clint, 2023).

Bates (2015) indicates that students learn in different ways in various contexts, which create a number of comprehensive educational environments that optimize the ability of students to learn and make teaching so interesting.

In this manner understanding and discussing educational environment as a factor that affects the writing skills of EFL students requires explaining the aspects or components that contribute to educational environment such as instructional, social, psychological, and physical environments.

Similarly, Nation (2009) indicates that appropriate classroom instructions which affect student' writing skill improvement requires understanding the stages of writing process such as gathering ideas, organizing ideas, presenting ideas in texts, reviewing, and editing, to locate sources of students' difficulties in their writing.

In the same line, Hyland (2003) states that instructional choices directly influence how students engage with writing and develop their skills in terms of responding to students writing, correcting errors and giving feedback. Furthermore, writing development occurs within a social context. Interactions among peers and also between teachers and students affect writing; positive relationship can enhance collaborative learning and reduce the stress of writing tasks.

Another aspect of educational environment is psychological climate that plays a significant role in learning language including the writing skills. Due to the fact that, writing is difficult for EFL learners and evokes anxiety because of who feel insecure about their grammar, vocabulary, ability to express ideas and their thoughts clearly. At the same time, classroom conditions like task types, teacher feedback, and classroom interactions affect and shape other feelings such as motivation, learner beliefs, and self-efficacy or confidence. A supportive psychological environment or classroom promotes motivation, decreases fear of making mistakes, encourages

students feel psychologically safe to take risks, experiment with language, and practicing necessary for writing skill development. It may help students revise negative beliefs and adopt more growth-oriented mindsets (Dörnyei, 2005).

However, Higgins, Hall, Wall, Woolner, and McCaughey (2005) state that there is strong evidence for the effect of basic physical variables (air quality, temperature, noise) in the classroom on learning and stated that student behavior and outcomes, and also forceful opinions, on the effects of lighting and color.

It is the elements of physical classroom environments such as classroom displays, the nature of lighting and aeration had varying influences on writing instruction and learning. Thus, the physical classroom environment plays an important role in writing instruction and learning, its usage is more important (Nabiryo and Sekiziyivu, 2019).

To conclude that educational environment through the instructional, psychological, social, and physical dimensions have the direct impact on writing development in EFL contexts.

### *C. Educational technological tools in writing*

Using digital tools motivates learners to write with more enthusiasm, since the interaction makes writing a more interesting task. Sandolo (2010) is of the view that learners seem to be more engaged and creative when writing practice is integrated with the use of technology. Through technology students are enabled to include images, audios, videos, and other multimedia elements which enrich their experience in writing as well as the diversity in the ways they express their ideas.

With advancing technology, educating and teaching are no longer having the same traditional form as before. The integration of such tools into educational settings has reshaped the way learners engage in learning processes, such as: writing. Technology has enhanced students' skills in essential aspects of writing, such as: drafting, revising, and receiving feedback which provides them with a supportive collaborative and interactive environment, especially in second language teaching.

Amongst the most widely used methods, the word processing tools such as: Microsoft Word and Google Docs are the most supportive ones since they enable learners to draft their work, revise and edit it effectively without using conventional methods using pen and paper. Hyland (2003) believes that through simplifying mechanical areas in writing, word processing shifts the writers focus onto the content and organization, since they can edit, move, replace and delete words and parts of their writing easily in a smooth and effective way. Moreover, they can construct clearer and more revised texts through features like: spellcheck, formatting tools and grammar correction.

Online communication and collaborative writing platforms such as: shared Google Docs, blogs, and wikis are another beneficial use of technological tools. Godwin-Jones (2015) emphasizes the impact of digital and technology advances in promoting the authentic communication and interaction amongst learners. An example could be blogs, by means of which learners are motivated and encouraged to interact with real audiences through writing. This communication method

makes the writing task feel like a social activity rather than an academic requirement.

Additionally, other useful features such as: grammar checker and feedback tools play a crucial role in developing learners' writing skills. These tools support students' awareness through recognizing their mistakes and improve accuracy and their choice of words while writing. Vicentini and de Oliveira (2018) highlight that receiving feedback from digital tools as well as peers raises students' awareness and improves their engagement in their independent revision, editing and learning process.

To conclude, using technology in writing has a crucial impact in the development of learners' writing, due to the features facilitating the process by encouraging collaboration, providing feedback as they write, motivating them to improve, and many more advantages these aspects offer, that can be effective in both teaching and learning writing. The success of such features, however, relies on how they are implemented, since they can shift rigid writing instructions into interesting and effective experience when used reasonably.

## IV. METHODOLOGY

### *A. Research design*

This study followed a mixed-method research design; quantitative and qualitative method to collect data, since using a combination of both in a single study can provide a fuller picture on the research topic than using one of them alone. In this way, a questionnaire is an effective tool to collect a large quantitative data from a large sample. Likewise, interviews are commonly used to in-depth understand the participants' insights and experiences which is a qualitative data.

### *B. The Sample*

The participants include students at the third stage of English Language department in the morning/evening classes, at College of Basic Education/University of Sulaimani, located in Sulaymaniyah city/Kurdistan Region of Iraq for the academic year (2024-2025). The total population was (159) one hundred and fifty nine students from which the sample of (108) one hundred and eight students (29 twenty nine male and 79 seventy nine female) have willingly answered the questionnaire by selecting one option for each item. Additionally, three EFL university instructors, who currently teach or have (previously) taught the sample students, were interviewed.

### *C. Instruments*

A questionnaire (5-point Likert Scale) for EFL university students and semi-structured interviews for some EFL university instructors were the tools of the study for data collection. The questionnaire consisted of fourteen items, and each item contains five options (1= Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree). The researcher designed the questionnaire to find out to what extent Kurdish EFL students perceive the role of educational environment and technical tools in developing their own writing. And a semi-structured interview was designed (as triangulation) in a way that the researcher can ask more follow up questions, which consists of eight questions on the two selected variables for the university instructors.

*D. Validity*

Validity is defined as "the extent in which the research or measurement measures what it was intended to measure" Karnia (2024, p.139). In this study, face and content validity are achieved through checking the instruments by a number of jury members consisted of 12 professors, PhD holders and specialists in English language in the universities of KRI. These members were selected based on their expertise.

In this concern, Karnia (2024) defines that face validity evaluates an instrument if it appears to be appropriate and has relevant items on the "face of it" in order to measure what is intended to. And, content validity determines if the questions on the instrument represent all possible questions that could be asked about the content and adequately measure the supposed concept.

Depending on all the jury members' comments and suggestions the developed version of the study instruments were designed, although most of the jury members mentioned that the instruments have been designed carefully.

*E. Reliability*

Reliability refers to the consistency and stability of a measurement. When a tool produces the same results in repeating under the same conditions it means that the findings have high reliability, and are stable and dependable. Test-retest reliability, internal consistency, and inter-rater reliability are the types of reliability (Karnia, 2024).

In addition, Correlation coefficient between two variables with the data quantifies the degree of reliability, with values typically ranging from 0 to 1. A coefficient closer to 1 indicates higher reliability; greater than 0.80 and 0.90 is considered high reliability, while values below 0.70 often suggest that the measure may not be sufficiently reliable for research purposes (Andersson, Boateng, and Abos, 2024; and Karnia, 2024).

In this manner, a pilot study was conducted for a small sample of participants, which are 15 university students to those who will be participated in the full study; table (1) also illustrates that. The results of the pilot study have been used to check internal consistency of the questionnaire instrument by using a statistical technique; Cronbach's Alpha, the value is 0.906 as it is also presented in table (2), it is above 0.90 indicating high reliability; the questionnaire is highly reliable and ready to apply in the main study and the items will measure the same concept consistently.

**Table (1)**  
shows the number of participants for reliability statistics according to Cronbach's Alpha

Cases	Frequency	Percent
Valid	15	100.0
Excluded	0	.0
<b>Total</b>	15	100.0

**Reliability Statistics**

**Table (2)**  
presents the Cronbach's Alpha's value

Cronbach's Alpha	Number of Items
0.906	14

*F. Data analysis techniques*

After gathering the quantitative data and entered in SPSS version 23 software, They were analyzed with using descriptive statistics such as means, standard deviations, t-value, and p-value to summarize the participants' responses. Then, Inferential statistics especially one-sample t-test was employed to examine differences across variables. On the other hand, investigate the role of the variables on the participants' writing proficiency.

V. DATA ANALYSIS AND DISCUSSIONS

In this section, the results of the data obtained from the students' responses of the questionnaire and teachers' responses to the interview would be analysed statistically or quantitatively and then discussed qualitatively. Two basic variables were under investigation: educational environment and technological tools that were hypothesized to affect EFL students' writing proficiency. To analyze the data, descriptive statistics and one-sample t-test were utilized as methods of analysis. Additionally, to support the quantitative findings of the first tool, the interview results are summarized and then discussed thoroughly.

*A. Analysis of Educational Environment Variable*

To find out how Kurdish EFL university students perceive the role of educational environment in the developing and improving writing proficiency, the following questions were raised and the results of the questionnaire are presented in Table (1):

**Table (3)**  
Descriptive Statistics and One-Sample t-test for the Educational Environment Variable

Variables	Statements	Responses					Statistical Indicators			
		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Standard Deviation	t-value	P-value
Educational Environment	Our writing syllabus reflects both the teaching goals and students' needs.	6	17	34	37	14	3.33	1.068	3.244	
	The educational environment creates an atmosphere where students feel safe to take risks and make mistakes, revise, and grow.	5	27	33	30	13	3.18	1.084	1.687	0.095
	Classroom conditions like task types, teacher feedback, and classroom interactions affect students' feelings such as motivation and confidence.	6	7	27	49	19	3.63	1.028	6.362	0.000
	An unsupportive psychological environment prevents students in completing writing assignments, even if they are capable.	6	10	28	36	28	3.65	1.130	5.961	0.000

A Positive relationship between teachers and students can enhance collaborative learning and reduce the stress of writing tasks.	6	8	18	42	34	3.83	1.123	7.710	0.000
The physical conditions in my classroom (temperature, noise, lighting) affect my writing performance.	4	17	18	43	26	3.65	1.122	6.005	0.000
Providing good classroom environments for writing improvement, such as reducing the number of learners in each class is necessary.	3	7	30	48	20	3.69	0.942	7.662	0.000
<b>Overall Educational Environment</b>						<b>3.566</b>	<b>0.227</b>	<b>6.606</b>	<b>0.001</b>

Table (3) describes the descriptive statistics and one-sample t-test for all the items of the educational environment variable in which the following outcomes are illustrated: The overall weighted mean of " Educational Environment " is 3.566, and the standard deviation is 0.227 with a significant p-value of 0.001, which is less than 0.05, indicating that, in general, the respondents agree on all the statements of the educational environment variable towards writing proficiency.

It is noticed in figure (1). In such a way that the mean of the statements "A Positive relationship between teachers and students can enhance collaborative learning and reduce the stress of writing tasks " is 3.83, " Providing good classroom environments for writing improvement, such as reducing the number of learners in each class is necessary" is 3.69, " The physical conditions in my classroom (temperature, noise, lighting) affect my writing performance" is 3.65, "An unsupportive psychological environment prevents students in completing writing assignments, even if they are capable " is 3.65 and " Classroom conditions like task types, teacher feedback, and classroom interactions affect students' feelings such as motivation and confidence" is 3.63 and their standard deviations are 1.123, 0.942, 1.122, 1.130 and 1.028 respectively with p-values which are less than 0.05, it is illustrated that the responders strongly agree with these statements, indicating that, students believe that their stress of writing decreases with having a good relationship among teachers and students, and also their writing proficiency does not improve properly in a crowded class, and their performance is better within an appropriate temperature and light class. When students feel comfortable psychologically and they do not afraid in making mistakes, they can complete their writing tasks well, otherwise they cannot. Constructive feedback, students and teachers interactions, and variety in tasks increase students' motivation and confidence. For the statement "Our writing syllabus reflects both the teaching goals and students' needs" the mean is 3.33 and standard deviation is 1.068, with the p-values that is less than 0.05, it is illustrated that the responders agree that their writing syllabus include the teaching goals and students' needs. In contrast, the participants disagree with the statement "The educational environment creates an atmosphere where students feel safe to take risks and make mistakes, revise, and grow" with

a mean score of 3.18, a standard deviation of 1.084, and a p-value of 0.095 which is more than the significant level 0.05. It means that students do not feel safe to make mistakes and take risks in their classroom.

The quantitative findings and the results indicated above, answer the first research question; "To what extent do Kurdish EFL university students perceive their classroom environment as supportive in their writing?" and confirm that: Kurdish EFL students view the educational environment as supportive to their writing proficiency, especially in terms of teacher-student relationships, peer interaction, constructive feedback and classroom conditions, though they expressed less confidence and do not feel safe to make mistakes and take risks in their classroom.

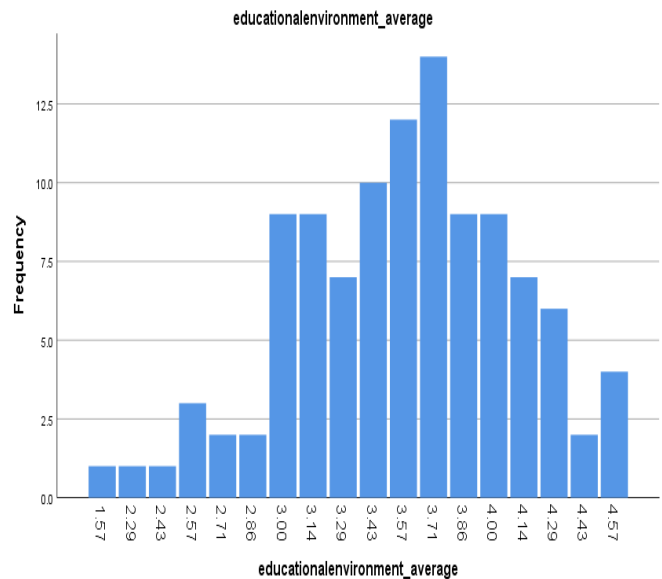


Figure (1): bar graph of participants' answers for educational environment variable

Figure 1 indicates a right skewed distribution of responses, which means that the participants' answers for the questionnaire for educational environment variable tends towards the answer "agree", out of a total of five responses of the Likert scale ranged from (strongly disagree to strongly agree).

*B. Analysis of Educational Technological Tools Variable*

In order to explore the extent that Kurdish EFL university students' perceive the importance of educational technological tools in their writing proficiency, the tabulated questions are raised, and the results of educational technological tools items from the questionnaire are shown in Table (2):

**Table (4)**  
**Descriptive Statistics and One-Sample t-test for the Educational Technological Tools) Variable**

Variables	Statements	Responses				Statistical Indicators				
		Strongly Disagree	Disagree	Neutral	Strongly Agree	Mean	Standard Deviation	t- value	P-value	
Educational Technological Tools	I utilize digital spelling and grammar checkers when composing written content	7	7	35	41	18	3.52	1.054	5.110	0.000
	I rely on technological tools for generating ideas or suggestions when drafting written documents	3	9	44	44	8	3.42	0.855	5.063	0.000
	I use writing Apps that help me write better	11	20	25	36	16	3.24	1.214	2.061	0.042
	Technology-generated templates or frameworks assist me in structuring my written content	2	11	47	37	11	3.41	0.876	4.834	0.000
	I depend on technological paraphrasing tools to rephrase sentences in my written work	6	14	37	38	13	3.35	1.035	3.533	0.001
	I rely on technological proofreading tools to identify errors in my written work	5	17	32	41	13	3.37	1.038	3.710	0.000
	I depend on technological tools for summarizing long written materials	6	19	18	50	15	3.45	1.106	4.265	0.000
<b>Overall Educational Technological Tools</b>						<b>3.394</b>	<b>0.088</b>	<b>11.89</b>	<b>0.000</b>	

Table (4) describes the descriptive statistics and one-sample t-test for all the items of the educational technological tools variable in which the following outcomes are illustrated:

The overall weighted mean of " Educational Technological Tools " is 3.394, and the standard deviation is 0.088 with a significant p-value of 0.000, which is less than 0.05, indicating that, in general, the respondents agree on all the statements of the educational technological tools towards writing skills as also it was noticed in figure (2). In such a way that the mean of the statement “I utilize digital spelling and grammar checkers when composing written content.” is 3.52, and the standard deviation is 1.054 with a p-value is 0.000, which is less than 0.05, it is illustrated that the responders strongly agree with this statement. It means that students mostly use digital tools to check spelling and grammar of their writing.

The mean scores of the statements “I depend on technological tools for summarizing long written materials” is 3.45, “I rely on technological tools for generating ideas or suggestions when drafting written documents” is 3.42, “Technology-generated templates or frameworks assist me in structuring my written content” is 3.41, “I rely on technological proofreading tools to

identify errors in my written work” is 3.37, “I depend on technological paraphrasing tools to rephrase sentences in my written work” is 3.35, and” I use writing Apps that help me write better” is 3.24 and their standard deviations are 1.106, 0.855, 0.876, 1.038, 1.035 and 1.214 respectively, with the p-values that are less than 0.05, it is illustrated that the responders agree with these statements. In other word, students use technological tools and writing Apps to write better in many aspects such as creating ideas and recommendations to start writing, to shorten long texts, generating frameworks of their writing, selecting errors, and rephrasing sentences in their written works.

Hence, the second research questions stated: How do Kurdish EFL university students perceive the role of technological tools in enhancing their writing? Is answered that:

Kurdish EFL students perceive technological tools as highly effective, as they depend on spelling/grammar checkers, proofreading, summarizing, and collaborative platforms, which they believe enhance accuracy, idea generation, and independence in writing.

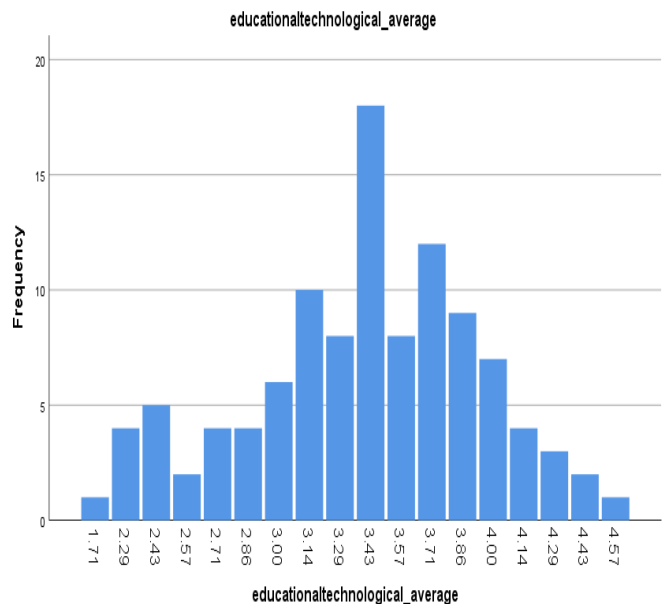


Figure (2): bar graph of participants’ answers for educational technological tools variable

From the figure 2 above, it is noticed that there is a skew to the right, meaning that the participants’ answers in the questionnaire for educational technological tools variable tend towards the answer "agree", out of a total of five responses of the Likert scale ranged from (strongly disagree to strongly agree).

**C. Results and discussion of the instructors' interviews**

To have more insights about the role of educational environment and technological tools in the writing proficiency of Kurdish EFL university students, interviews were conducted with three instructors who teach writing proficiency to this study participants in English Language Department, at College of Basic Education/University of Sulaimani. After explaining the objectives of the study, each one of the instructors answered a number of prepared questions in series.

1) *The questions and answers of the interviewees on educational environment variable*

- Do environmental factors such as class size, teacher, peer interaction, or support affect students' writing development? How?
- How does classroom environment encourage students feel psychologically safe to take risks and make mistakes?

**Interviewee 1:** They significantly affect students' writing development. The bigger the class size, the slower the process of learning. Teaching methods and effective strategies of the teacher will definitely affect the students' writing process. Peer interaction paves the way for better writing product. It would be better for students to write in groups of two or three.

The environment can encourage and discourage the students accordingly; it depends on the teacher, the class size and the students as well. Being psychologically safe and comfortable will certainly provide a better opportunity for the students to improve their writing skill in class.

**Interviewee 2:** Yes of course, class size, teacher support, and peer interaction affect the writing performance of students. Large class size affects the teacher's performance not just students', because the teacher cannot provide good feedback for the students and fill them up, and give them more assignments properly. With peer interaction students support each other's, and feel more comfortable in working together and having feedback from their peers than the teacher. Because for any reason they feel shy and afraid of their teacher, and also they can discuss it together more than the teacher.

Comfortable climate in the classroom encourages students to feel safe, and they would like to work better. It affects them positively, they will not be afraid in making mistakes. As I told them, making mistakes is part of our life. So, do not be afraid of making mistake it is something normal. In this way, we reduce their fear of receiving aid, provide a nice and enjoy full environment for the classroom, and they will be perform better.

**Interviewee 3:** Yes of course, class size, teacher support, and peer interaction play an important role in students' writing development. Smaller class sizes allow for more individual feedback, while teachers can help them to build confidence and guide students through the writing process. And peer interaction helps students share ideas and learn from one another.

By being kind, respectful, and supportive students feel safe to take risks and make mistakes. When teachers are patient, give helpful feedback, and praise effort, students feel more confident to try new ideas. If they know they won't be judged or laughed at for making mistakes, they're more likely to share their thoughts and keep improving.

From the interviewees' answers about the questions on educational environment, it can be declared that Interviewee 1 explained the impact of class size, teacher support, and peer interaction on the development of students' writing. If a large number of students are in the class, the process of learning will be slower. Likewise, teachers' effective strategies significantly influence the students' writing process. And also, working in groups help students to write better. The teacher, class size and students themselves affect their emotions to be positive and negative. While, students feel comfortable and safe psychologically in the classroom, they obtain more

opportunities to develop their writing skill. Likewise, interviewee 2 stated that these environmental elements (class size, teacher support, and peer interaction) certainly affect students' writing performance. Large class size beside its effect on students also affects the teacher's performance. Teachers cannot give an appropriate amount of instruction and feedback to their students in a crowded class. Group working impact of students positively, because they support each other, and they are more comfortable about receiving feedback from their peers than the teacher. When the classroom climate is comfortable, students feel safe and positive. Hence, their teacher should explain for them; making mistake is something normal in our life it does not need to be afraid. In this way, a nice and enjoy full classroom environment will be provided, and their fear will decrease and they will write in a better performance.

Finally, Interviewee 3 believed that class size, teacher support, and peer interaction undoubtedly have a significant role in students' writing development. Moreover, teacher can provide students more individual feedback; guide them throughout the writing process to build confidence in a small class size. And also, interactions amongst students give them chances to share and receive ideas from each other's. If their teacher is kind and patient, and gives them positive feedback students feel safe and more confident to take new ideas. When students realize that their effort is respected, and making mistake is not something laughing they like more to share their thoughts and sustain improvement.

2) *The questions and answers of the interviewees on educational technological tools variable*

- Do you use digital writing tools or platforms, such as Google Documents, LMS (Learning Management System), writing apps, in your writing classes? And do the students use them? If, yes; what impact do these tools have on the students' writing performance, in terms of grammar, vocabulary, and revision?
- How frequently such tools are used?
- Have these tools influenced students' autonomy in writing or collaboration with peers?

**Interviewee 1:** Yes, several instructors and students now use digital writing platforms and tools, such Quill, Grammarly, and Google, in their writing programs. For example, direct feedback helps students' correct grammar, punctuation, and sentence structure. Students' writing performance is significantly impacted by these tools, especially when it comes to grammar, vocabulary, and revision. And also, using these tools varies from time to time, and depending on teachers' and students' selection.

Yes, these tools influenced students' autonomy in writing, because they produce clear and more grammatically accurate writing.

**Interviewee 2:** Yes, I use Google Documents and LMS (Learning Management System), and I encourage students to use Google translate, Gemini, and AI tools. I also give them those websites to use and write better. On the influence of using these tools, students' writing performance will be better.

Because technological tools are accessible at any time for everyone, students and also teachers use them mostly.

Yes, using technological tools encourages students to develop autonomy. They will be self-educated; they feel free to search any engine to find the answers of their questions to write better, and obtain many sources.

**Interviewee 3:** Digital platforms like Google Docs and learning management systems are integral in writing classes. These tools: Offer instant checks for grammar and vocabulary. Make revising and tracking changes easier. Allow real-time collaboration, even outside of class.

These platforms are used in nearly every assignment or peer review, about once a week or more. Students are more likely to initiate revisions independently and work together—technology gives them both the opportunity and the responsibility.

From the interviewees' answers about the questions on technological tools, it can be concluded that Interviewee 1 indicated that in writing programs instructors and students use digital writing platforms and tools, such Quill, Grammarly, and Google. Using these tools crucially influence students' writing performance which helps to correct grammar, punctuation, and sentence structure within direct feedback, select vocabulary and revise their writing. S/he adds that students' autonomy in writing is impacted by the employment of digital tools, because they can create more grammatically accurate and readable written product. Interviewee 2 states that s/he uses technological tools such as Google Documents and LMS (Learning Management System) mainly, and s/he explains that how encourages students to employ such tools Google translate, Gemini, and AI (Artificial Intelligence) tools, and also websites. These technological tools are useful in terms of the requirements of writing and help students write better. It is indicated that students' writing performance will be better and they became more independent with using digital tools. Since, they can gain any source that they want and improve their writing by themselves. Finally, Interviewee 3 argues that in writing classes technological tools and platforms such as Google Docs and learning management systems are fundamental, because these tools facilitate checking grammar and vocabulary, revising and amending. They also allow real-time collaboration, even outside of class. They are used nearly every week for every assignment preparation. However, students are given opportunity to revise their writing works independently as well.

## VI. DISCUSSIONS

Based on the results of the data analysis for the questionnaire, from the tables (1 and 2) above, it can be seen that the mean scores of educational environment and educational technological tools variables are 3.566, 3.394, respectively, their standard deviations are 0.227, 0.088 respectively, and their significant p-values are 0.001, 0.000 respectively, and both of the p-values are less than 0.05, indicating that both variables are statistically significant, and they have a significant role in Kurdish EFL university students' writing proficiency.

In the same line, all the instructors affirmed the importance of the role of educational environment on students' writing proficiency, more specifically the class size, teacher support, and peer interaction. And they have explained how a large class size effect on teachers' performance, providing feedback,

directing the writing instructions, which all have a significant effect on students' writing improvement. In other word, in a small class size teachers are able to provide students individual feedback, guide students through assignments, and give them tasks more appropriately. In this same way, the interviewees indicate that peer interactions share their ideas and thoughts with each other, and learn also from each other, which create a better writing product. When students perceive that their efforts are praised and abilities are respected, they naturally feel comfortable and safe psychologically in the classroom. This might reduce their fear and stress in making mistakes, and take risks. At that time, students' writing abilities will improve effectively.

As well as, interviewees' responses implied the significance of these tools in writing. Thus, it can be stated that using digital tools helps students to write better, and became autonomy in writing, and self-education.

The discussions above uncover the sample university instructors' point of view, accordingly, through the interview responses the researchers could answer the third research question; that: the three interviewed instructors emphasized the role of smaller class sizes, teacher support, and peer collaboration in improving writing. They also highlighted that digital tools like, Grammarly, Google Docs, LMS, enhance grammar, vocabulary, and autonomy, that in turn confirming the students' perceptions.

This is a verification for the findings of the questionnaire which reveals that educational environment and the use of technological tools have significant roles in Kurdish EFL university students' writing proficiency.

These findings suggest that university instructors, department administrations and language educators have to work on creating and providing an effective classroom and better educational environment for the students, and integrate technological tools in their writing curriculum, creating a sort of psychologically supportive environment for better improving the students writing skill. Thus, these two factors under research do assist students to achieve a better level of writing and lead to better students' engagement and improvement in writing proficiency.

## VII. FINDINGS

From the results of the questionnaire and the instructors' interviews which are managed in the current study, the following findings are obtained concerning the three research questions:

1. The results uncover that, educational environment; psychological, physical, instructional, and social aspects of the environment, play a vital role in writing proficiency of Kurdish EFL university students.
2. According to the results, technological tools have a resilient role in the improvement of Kurdish EFL university students' writing proficiency.

## CONCLUSIONS

It is clear that writing is a significant skill in away succeeding in this skill improves the other skills in a language, it means they are interrelated. Since, it requires variety proficiency to

write appropriately, it is considered as difficult and complex skill and EFL students face different difficulties because of the impact of internal and external factors.

The aim of this study is to explore Kurdish EFL university students' and instructors' perceptions of the role of educational environment and technological tools in Kurdish EFL writing proficiency. A questionnaire is used as one tool to collect data from students, and an interview, as the second tool, for their teachers. A quantitative and qualitative method were employed to analyze the data and then discussed.

The results reveal that: firstly, educational environment and technological tools have significant role in students writing proficiency as it is revealed: students perceive the educational environment as supportive, primarily in terms of teacher–student relationships, peer interaction, constructive feedback, and classroom conditions. despite their report that they do not feel safe to make mistakes and take risks in their classroom, specifying a limitation in the psychological aspect of the environment. Secondly, concerning their perceptions on the second variable; technological tools, students conveyed positive opinions and perceptions of grammar and spelling checkers, writing applications, paraphrasing and summarizing tools, and collaborative platforms, as they are considered as effective tools in enhancing accuracy, generating ideas, structuring content, and supporting autonomy in writing. And finally, support to these findings is the instructors' perspectives. They reported that smaller class sizes, teacher support, and peer collaboration do provide a stronger educational environment for developing writing proficiency of the students, while technological tools improve other aspects of writing, such as grammar, vocabulary, and independent revision.

Thus, in general the study emphasizes that both Kurdish EFL students and university instructors perceive that the two variables: educational environment and technological tools as having crucial roles and contribute significantly in writing.

These findings suggest that university instructors, department administrations and language educators have to work on creating and providing an effective classroom and better educational environment for the students, and integrate technological tools in their writing curriculum, for better improving the students' writing proficiency.

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