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Research Paper

***The Contribution of Cornell Note-Taking Strategy
Instruction to the Listening Comprehension of Iranian EFL
Learners: A Case of Learners' Perception***

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Abstract

The current study is a quasi-experimental mixed method that sought to further investigate the effect of teaching the Cornell method on improving the listening comprehension of Iranian EFL learners. It also aimed to examine the perceptions of English language learners toward the Cornell method. The participants were 60 female students at the Mehr-e-Taban Girl's bilingual high school in Shiraz. Data collection tools included an Oxford Quick Placement Test, a questionnaire, a semi-structured interview, and one sample of the First Certificate in English (FCE) listening test. Data analysis was conducted using a one-sample t-test, independent sample t-test, paired samples t-test, and the Covariance test. According to the results, the experimental group outperformed their peers in the listening comprehension test. Qualitative data analysis revealed that students viewed the Cornell method as beneficial for comprehending listening tests. The study recommends using the Cornell method to enhance students' listening skills and critical thinking.

Keywords: Note-taking, Listening comprehension, Iranian EFL learners, Learners' perceptions.

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Introduction

Achieving effective communication with native speakers of a foreign language demands a comprehensive understanding of its skills and essential components. English as a foreign language has received increased attention in Iran. To learn the English language as effectively as possible, every EFL learner must master its four essential skills. The skill of listening particularly holds the utmost importance and complexity, as it is the initial skill one discovers while learning any language. It is quite obvious that in the context of Iran, ELT teachers and students do not pay enough attention to this fundamental skill and it is typically taken for granted in EFL courses (Ahour & Bargool, 2015, p. 2328). As a result, many students do not get great achievements in this area. Learners identify listening as a challenging and complicated skill to master, which explains why they devote less time effort, and attention to learning it than they do to other skills.

Studying the history of learning a foreign language unveils that until recently listening was practically overlooked in EFL classrooms and more emphasis has been paid to speaking and writing (Ahour & Bargool, 2015; Anjarsit & Adnan, 2017; Brown, 2008, as cited in Sert Aktuğ, 2021; Zohrabi & Esfandyari, 2014). In addition, teaching listening skills has been a big challenge for EFL teachers (Anjarsit & Adnan, 2017; Ngwoke, Ugwuagbo, & Nwokolo, 2022). On the other hand, English

teachers and instructors do not pay much attention to the note-taking issue in listening classes (Siegel, 2019). This is because they are either not pedagogically oriented with note-taking instructions, or do not know how to teach note-taking strategies (Siegel, 2019; Siegel, 2022). In applying practical note-taking principles, language experts must grapple with two distinct challenges that require careful consideration and planning (Marani & Heidari Tabrizi, 2018).

“The first one is the possibility of teaching note taking systems and principles to students and the second one is how to teach them methodically” (Marani & Heidari Tabrizi, 2018, p. 504). It can be implied that teaching note-taking strategies, which are crucial for improving EFL students' listening comprehension skills, may not be prioritized by English teachers during class time. That is why learners are poorly taught listening skills (Ngwoke et al., 2022), and ergo, the students' listening score is the lowest among all their language skills (Anjarsit & Adnan, 2017). To eliminate this problem, specific skills in note-taking should be defined and elaborated by English mentors (Ornstein, 1994). Based on Siegel's (2022) assessment, it is clear that the available research on L2 note-taking is not adequate, and there has been a relatively small amount of research on this matter. In addition, he affirmed that many of the current teaching approaches do not recognize and tackle the intricacy of L2 note-taking (Siegel, 2022). This is the

problem, which is also distinctly visible and tangible in the context of Iran and is a confirmation of Siegel's theories.

Manifold studies have been carried out to evaluate the impact of note-taking on listening comprehension (Al-Ghazo, 2023; Aljuhani, 2022; Anjarsit & Adnan, 2017; Gur, Dilci, Coskun, & Delican, 2013; Hayati & Jalilifar, 2009; Kiliçkaya & Çokal-karadaş, 2009; Maulidia, Ys, & Silviyanti, 2021; and Movsesyan, 2015). However, as Siegel (2022) has asserted, "Lack of replication remains a concern as well" (p. 252). Therefore, the researcher intended to replicate those studies to take a step to further investigate this controversial issue.

Despite the plethora of research studies on the scope of note-taking and listening comprehension, to the knowledge of the researcher, there has not been any study regarding this vital issue in second language learning, especially in the EFL context of Shiraz. Generally speaking, in the context of Iran, there is a dearth of studies with regard to note-taking in L2 and the role it plays in the improvement of the listening comprehension of EFL learners. To achieve this goal, curriculum designers should incorporate note-taking strategies into listening comprehension instruction. The question is why curriculum developers do not include note-taking instructions in Iran's educational curriculum. Introducing diverse note-taking techniques into the school curriculum can facilitate the second language learning of

Iranian students and will have a significant effect on improving their listening skills. In addition, in the future, it will greatly contribute to the academic achievement of high school and university students. On the other side of the spectrum, it is especially helpful for English for Academic Purposes (EAP) students as well as English for specific purposes (ESP) students. Although they seem to be good in their content knowledge, they usually suffer from weak listening comprehension abilities. Therefore, since they participate in different academic conferences, they need to improve their listening skills to get the most out of the lectures.

To this end, the researcher considered conducting a study related to the effect of using the Cornell method- as a note-taking strategy- in improving the listening comprehension of Iranian EFL learners in the context of Shiraz to help pave the way for the existing gap to be partially covered or at least reduced. In light of the foregoing research, it sounds like there is a dearth of studies assessing the perceptions of learners toward note-taking and their development of listening skills. Consequently, to gain a better insight, the researcher made an attempt to delve into the learners' viewpoints.

The study was motivated and focused to answer the subsequent questions based on the findings of the research:

1. Is there any significant difference between the listening

comprehension scores of those who take notes during listening and the non-note-takers?

2. What are the perceptions of EFL learners about utilizing Cornell's note-taking strategy while listening?

Review of the Related Literature

A study was conducted by Maulidia et al. (2021) on using Cornell note-taking to improve listening comprehension. The study was quantitative research with 23 English university students. The findings indicated that Cornell's note-taking technique improved students' listening comprehension skills. Critically thinking, if there had been a control group available, the comparison between those who received the treatment and those who were not taught the Cornell note-taking technique would have rendered more valid results. Furthermore, it can be challenging to administer the same set of questions, since some students may benefit from good enough memory.

Soumokil, Nikijuluw, & Lekatompessy (2021) conducted research based on the perceptions of students toward the use of note-taking strategies in listening classes. The researchers utilized a mixed-method approach, which encompassed class observation, a questionnaire, and an interview, to gather data. The participants were English University students. According to the results, note-taking is regarded as an important tool for students to acquire

information easily, as most students had positive attitudes towards note-taking implementation.

Salame and Thompson (2020) made an attempt to investigate learners' perceptions as well as the impact that note-taking may have on improving students' performance, achievement, and learning. A survey Likert-type questionnaire and open-ended questions were used to collect data. Data analysis revealed that note-taking has an effect on students' success and improves learning. Strategic note-taking is indicated to be a useful tool for the students' success in this study. Since learners will be able to discriminate important information from trivial points.

Going back to the aims of this study, Syafi'i (2019) carried out a descriptive qualitative research study under the title of students' response [sic] of using [sic] Cornell note taking system (CNTS) in listening class. The instruments used to gather the data were a questionnaire and an interview. The findings indicated the positive function of the Cornell note-taking system in listening classes and proved its effectiveness, especially in the case of guided notes. According to the results of this study, Cornell's note-taking system proved to help students to be good note-takers. Moreover, the Cornell note-taking system was proven to be a helpful study tool in listening classes. An increase in the number of participants could be a determining factor for more reliable results.

İpek (2018) carried out a study

on 61 first-year English Language Teaching students with the aim of investigating their perceptions considering their progress in listening and note taking and found that students expressed a remarkable improvement in writing down important words, separating and recognizing main ideas, and using abbreviations and symbols. Data was gathered through an 8-item questionnaire on a 3-point Likert scale and an open-ended question. The results indicated that learners improved their note-taking skills as well as their listening comprehension. The learners were found to have gained a broader understanding of note-taking issues.

Zohrabi and Esfandyari (2014) implemented another related study in Iran. They investigated note-taking's impact on improving Iranian EFL learners' Students in Shiraz. Therefore, the researcher strived to explore the effect of note-taking on the

Methodology

Since this study attempted to investigate the impact of note-taking on EFL learners' listening comprehension, the researcher conducted a quasi-experimental design and executed an explanatory sequential mixed-methods approach to collect the data where the quantitative data were followed up by qualitative data to help the researcher provide stronger evidence in the findings. There were two variables to examine; the impact of note-taking as the independent variable and the advancement in the comprehension of listening as the dependent variable.

listening comprehension. In a quasi-experimental approach, they carried out this study among 30 EFL learners with intermediate levels of English proficiency aged 15-21. In short, the findings of this research revealed that taking notes during listening is beneficial in improving and raising the learners' listening comprehension scores.

Despite the plethora of research studies on the scope of note-taking and listening comprehension, to the knowledge of the researcher, there is not any study regarding this vital issue in second language learning, especially in the EFL context of Shiraz. Moreover, a lack of research studies exists on note-taking and listening comprehension examining the upper-intermediate high school

listening comprehension of EFL learners in Shiraz.

The sample of the study consisted of 60 upper-intermediate high school students studying at the Mehr-e-Taban Girls' bilingual complex in Shiraz. The sample included females in the age range of 15-18. All of them were native speakers of the Persian language. The sample was selected through cluster sampling in the form of two intact classes. They were homogenized through the Oxford Quick Placement Test (OQPT).

The instruments used to help the researcher investigate and better evaluate the improvements of students in listening comprehension through the use of the Cornell note-taking strategy were an Oxford Quick Placement

Test, one sample of the First Certificate in English (FCE) listening test, a questionnaire, and a semi-structured interview.

To conduct the current study, firstly, the researcher had to determine that the sample was homogenous. Therefore, the homogeneity of the English language proficiency level of the study sample was measured based on their scores on the Oxford Quick Placement Test (OQPT). It consisted of forty questions in the form of multiple-choice as well as some cloze tests. Based on the OQPT results, students were at an upper-intermediate level in English. Accordingly, this study sample was appropriate for the researcher's study. After the homogeneity of the sample was verified, the participants were divided into two groups: The Experimental group (EG) and the Control group (CG). Then, one sample of the First Certificate in English (FCE) listening test was administered as the pre-test. The pre-test aimed to identify the participants' strengths and weaknesses in listening comprehension. Moreover, it aimed to measure the students' capabilities to understand spoken English. The pre-test included three parts containing fifty multiple-choice questions. They were exposed to students through short dialogues, conversations, and long talks. Students were to listen to different recording passages and reply to the multiple-choice questions concerning the audio file they had just heard. In the second phase, the EG received direct training in the Cornell method through

listening exercises and sufficient rehearsals led by the researcher in ten 30-minute sessions once a week. The treatment sessions assisted the EG to become familiar and oriented with the Cornell note-taking strategy. However, the students in the CG did not receive any treatment. With a week interval after the treatment sessions, the sample of the First Certificate in English (FCE) listening test which had been administered as the pre-test was re-administered as the post-test. The post-test lasted forty-five minutes. All the audio files were played twice to help the participants better understand the contents they received. As scheduled, the EG was allowed to take notes and review their notes before answering the listening comprehension questions. The primary objective of the post-test was to evaluate how effective Cornell's note-taking strategy was in improving the listening comprehension of the EG, following the completion of the treatment sessions.

Additionally, as a supplementary stage of research, a modified version of a note-taking questionnaire which was developed by Carrell, Dunkel, & Mollaun (2002) was employed to shed light on the perception of note-takers. The primary objective of the questionnaire was to determine the degree to which Cornell's note-taking training was beneficial to students' listening comprehension. In terms of reliability, Cronbach's alpha of the questionnaire showed 0.78, which was an acceptable level, and in terms of validity, this

questionnaire had been used in several studies, including Kiliçkaya and Çokal-Karadaş (2009); Aminifard and Aminifard (2012); Clark et al. (2014); Murakami (2014); and Amini Asl and Kheirzadeh (2016). Therefore, the validity of the questionnaire might be confirmed by referring to the research carried out by these researchers. The 22 statements that made up the questionnaire used in this research underwent a review, and as a result of this review, three statements were removed ~~because~~ they were deemed irrelevant to the implementation process and ultimate goals of the research. As a result, 19 items were chosen on a five-point Likert scale, ranging from strongly agree to strongly disagree. After undergoing the training on the Cornell note-taking strategy, the EG was given the questionnaire that had been previously mentioned. They were instructed to carefully read each question and then indicate their opinion by circling the option, which they believed, was the most appropriate. The Qualitative phase of the study was done through a semi-structured interview. Fifteen students from the EG volunteered to participate in the interview session. The interview was done on a one-to-one basis, through which participants were asked some predetermined but open-ended questions. To maintain the accuracy of the data, it was deemed necessary to record all interviews. The interviews were recorded with the interviewees' consent. The recordings were then transcribed thoroughly and in

great detail to be put into qualitative analysis. Following this, the transcriptions were analyzed comprehensively using thematic schemata.

Data analysis has been done in two parts: descriptive statistics and inferential statistics. In the descriptive findings section, tables of descriptive statistics including measures of central tendency such as mean score and measures of variability like standard deviation as well as the frequency and percentage of participants' responses to the questionnaire were presented. In the inferential findings section, research questions have been tested. To examine the normal distribution of the variables in the present study, the Kolmogorov-Smirnov test was used. Then, to analyze the data, the Independent-sample t-test, paired sample t-test, one-sample t-test, and the covariance tests were used via the SPSS software program. The obtained data related to the questionnaire was also presented in the frequency tables and the percentage of responses was calculated. Following the semi-structured interview, the researcher meticulously coded the qualitative data. This led to the identification of 16 thematic categories, which proved crucial in facilitating a more detailed and accurate interpretation of the findings.

RESULTS

For the current study, the researcher collected both quantitative and qualitative data. The quantitative data analyzed the results of the pre-test and post-

test, as well as the EG's responses to the questionnaire. In order to accurately assess the OQPT scores of the participants in the study, the researcher utilized the One-Sample T-test approach. The results show that in both the control and experimental groups, the difference in students' grades with the determined value is

significant. The obtained significance level also shows that in both the experimental and the control groups, students' OQPT scores are significantly higher than the average level ($p < 0.01$). The results are shown in Table 1.

Table 1-Results of the One-Sample T-Test

Test Value = 31						
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
QPT control	6.451	29	.000	2.66667	1.8212	3.5121
QPT experimental	11.617	29	.000	3.66667	3.0211	4.3122

Then, an Independent T-Test was conducted to compare the OQPT scores of individuals in both the control and the experimental groups. Based on the results of Levene's test, it was concluded that the variance of data in both groups is equal ($p < 0.05$) and there was no

significant difference in the OQPT scores between the CG and the EG ($p > 0.05$). Based on the results, it can be inferred that the participants in the control and experimental groups had the same level of English proficiency prior to the introduction of the Cornell note-taking method in the EG.

Table 2-Independent Sample T-Test

Table 2: Independent Sample T Test								
Levene's Test for Equality of Variance s			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

Q P T	Equal varian ces assum ed	4.9 07	.0 31	- 1.9 23	58	.059	- 1.0000 0	.52009	- 2.041 08	.041 08
	Equal varian ces not assum ed			- 1.9 23	54.2 36	.060	- 1.0000 0	.52009	- 2.042 62	.042 62

The pre-test and post-test scores of each group were compared individually using paired sample t-tests to identify any significant differences between them. This analysis helped to determine if there were any changes in scores within each group. The analysis revealed that

the average student scores in the pre-test, prior to the note-taking method application, were 30.03. Nonetheless, after the intervention, there was a remarkable improvement in the results, with the post-test scores standing at 40.10.

Table 3- Descriptive Results of Paired Sample T-Test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Experimental post-test	40.1000	30	5.81526	1.06172
	Experimental Pre-test	30.0333	30	7.64507	1.39579

Table 4- Paired Sample T-Test Results (EG)

		Paired Differences							t	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower	Upper				
Pair 1	Experimental post-test - Experimental Pre-test	1.00667E1	4.80613	.87747	8.27203	11.86130	11.472	29	.000	

The results of the paired sample t-test conducted on the CG

showed that the pre-test and post-test scores of the CG did not exhibit a statistically significant difference at a significance level of ($p>0.05$). To put it differently,

there was no significant difference in the scores of the students in the CG between the pre-test and post-test.

Table 5

Descriptive Statistics Results of Paired Sample T-Test

		Mean	N	Std. Deviation	Std. Error
Pair 1	Control post-test	30.7667	30	6.66790	1.21739
	Control Pre-test	30.1000	30	5.51706	1.00727

Table 6-Paired Sample T-Test Results (CG)

		Paired Differences			95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error					
Pair 1	Control post-test - Control Pre-test	.6667	3.74473	.68369	-.73164	2.06497	.975	29	.338

By implementing the Cornell note-taking strategy, students in the EG have experienced substantial enhancements in their academic performance. Accordingly, this method shown to be incredibly effective in elevating their grades and overall academic achievements. The investigation and data analysis yielded positive results in proving the first research question. Therefore, it can be concluded that teaching and implementing the Cornell note-taking method significantly impacts students'

listening comprehension.

In order to evaluate whether the utilization of the Cornell method was beneficial, a Covariance test was done. The results ascertained with a high degree of confidence that the act of note-taking in the Cornell method had a significantly positive effect on the enhancement of the listening comprehension of students. The finding underscored the importance of note-taking as a valuable learning strategy.

Table 7- The Covariance Test Results (Tests of Between-Subjects Effects)

Dependent Variable: Post-test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2686.010 ^a	2	1343.005	85.943	.000
Intercept	491.627	1	491.627	31.461	.000
pre	1379.343	1	1379.343	88.268	.000
group	1320.323	1	1320.323	84.491	.000
Error	890.723	57	15.627		
Total	78908.000	60			
Corrected Total	3576.733	59			

a. R Squared = .751 (Adjusted R Squared = .742)

The scores of the students in the control and experimental groups were compared using an Independent T-test. Based on the test results, it appeared that there was no notable difference in the scores of the students in the CG between the pre-test and post-test

($p > 0.05$). However, in the EG, there was a significant difference between the scores of the pre-test and the post-test ($p < 0.01$). All in all, the first research question was positively addressed based on the results.

Table 8- The Independent Sample T-Test Results

Independent Samples Test

	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
pre-test	.039	58	.969	.06667	1.72129	-3.3787	3.51220
post-test	5.778	58	.000	9.33333	1.61532	6.09991	12.56676

The findings of the debriefing questionnaire were also presented in the form of frequency and percentage distribution tables. According to the feedback provided by the students, over half

of the students were unfamiliar with the Cornell method of note-taking, while some 30% had heard about this method before. A total of 93.4 percent believed that taking notes was beneficial for

enhancing their ability to answer questions and improving their test scores. 93.3% of the total population stated that note-taking increased their ability to retain lecture information. A majority of the respondents agreed that they could listen more attentively while taking notes to catch the important information; consequently, they could better understand the audio. A minority of the participants (6.7%) claimed that they experienced distraction while attempting to take notes and simultaneously pay close attention to the lectures' information. In the same vein, 16.6% stated that they needed more time to review their notes prior to answering test questions. On the other hand, 66.7% of the respondents reported no difficulty in simultaneously listening to the test questions and searching for specific information in their notes. A large portion of the participants agreed that they used their notes to answer test questions. Fifty percent of the results maintained that note-taking was not particularly helpful for uncomplicated lectures. In contrast, a total of 10 individuals (33.3%) remained impartial while five individuals (16.6%) claimed that they could benefit from implementing Cornell's note-taking strategy, even in the case of easy lectures. Responses concerning extended talks endorsed that taking notes during extended dialogues improved their ability to remember more details. Briefly, the overall analysis of the questionnaire findings yields positive results concerning the participants'

perceptions toward utilizing Cornell's note-taking strategy during listening tasks in the class.

After analyzing, classifying, and categorizing the data, the findings of the semi-structured interview concerning the effects of the Cornell method of note-taking on the listening comprehension of Iranian EFL learners were coded. In the final coding process of the study, sixteen themes were derived.

The interviewees stated that by getting used to taking notes while listening, they could improve their writing skills and make fewer mistakes in recording important information. They claimed that they could raise their listening scores. In fact, taking notes in the Cornell method helped them facilitate their learning process. They could become active listeners and they were able to boost concentration and attention. They also reported that were highly motivated to take notes, since it could lead to better results in their listening comprehension tests. In this method, students write words in abbreviated form. Furthermore, in order to keep up with the speed of conversations in listening conversations, they do their best to write down only the important information.

Therefore, this method of taking notes, according to the ideas extracted from participants in the interview, has helped the students learn the techniques of summarizing and abbreviating. They also had to paraphrase what they heard with their own words. This technique of indirect quotation is one of the categories that, according to the

interviewees, can be regarded as one of the advantages of taking notes using the Cornell method. In general, the Cornell note-taking strategy can drastically upgrade students' writing skills. Moreover, students reported that they enjoyed using Cornell's method because their notes became useful study guides. They could simply cover their notes in the right-hand column and then use the questions and cues in the left-hand column to recall key information. The interviewees also stated that using different techniques to take notes, such as using abbreviations, shorthand, symbols, lists, bullets, diagrams, and drawings, brings about visual attractions and challenges their minds. This gave them glee and inner satisfaction while taking notes in the Cornell method. The findings of the interview answered the second research question thoroughly.

Discussion and Conclusion

The main conclusion that was drawn from the findings of this research study is that utilizing Cornell's note-taking strategy during listening activities had significant effects on the advancement of students' listening comprehension and resulted in better scores and higher academic achievements. Therefore, the first research question to pursue the quest for discovering the effect of Cornell note-taking strategy training on students' listening comprehension is positively addressed. In comparing the results with the previous studies, the findings are in line with the findings reported by Hannachi (2021), Maulidia et

al. (2021), Syafi'i (2019), Anjarsit and Adnan (2017), Murakami (2014), and Hayati and Jalilifar (2009) according to which Cornell note-taking strategy had a significant effect on learners' listening comprehension. Their findings explain that students can benefit from Cornell's note-taking strategy to improve their listening comprehension skills. The second vital outcome of the current study is the optimistic and encouraging viewpoints of the participants toward using the Cornell method in their listening classes. Almost all of the students had promising impressions of note-taking after experiencing the Cornell Method training. Interestingly to note, they concurred that the Cornell note-taking strategy was considerably helpful and effective despite seemingly an arduous task to master at the beginning. The qualitative results are in line with the findings of Soumokil et al. (2021), Salame and Thompson (2020), and Murakami (2014) who reported that the participants of their studies conveyed positive ideas about employing note-taking during listening activities in listening class. The researchers found no study in the literature wherein no significant effect of Cornell's note-taking strategy on listening comprehension has been reported.

The act of note-taking while listening is extensively prevalent in educational settings. This process can be quite a challenge to start with. However, with constant effort and practice, it is likely that most students will improve and

gradually increase their skills. To practice note-taking, students need to write down the important information they hear in the lectures for future use. To this end, they will progressively imbibe the habit of active listening over time, as they continue to practice it. In the meantime, they are advised to review their notes several times after recording them to ensure that new information has been integrated into their minds. This is where the importance of having a strategic approach to note-taking becomes apparent. By using strategic note-taking, students can boost their ability to learn, recollect information, and develop academic achievement (Salame & Thompson, 2020).

Note-taking allows students to preserve more information and prevent the rapid loss of new information received. As per the research conducted by Hayati and Jalilifar in 2009, one of the major issues faced by EFL listeners is the swift fading away of the content to which they listen.

In conclusion, a considerably important finding is that the Cornell note-taking strategy not only improves students' listening skills but also helps them with their other language skills. In fact, Cornell's note-taking strategy helps EFL learners in numerous ways. By listening to audio files, students may improve their language-receptive skills. Concurrently, they make attempts to understand and comprehend what they hear. This can develop their cognitive skills. In this regard, they try to record the main ideas and keywords. Sometimes, they try to detect the meaning of

the new words by guessing. This reinforces vocabulary learning. In the meantime, by paraphrasing the sentences and eventually by writing a summary, the student's writing skill – one of the language productive skills - will improve. Reviewing notes contributes to better learning and recalling of information. Furthermore, through the process of note-taking, they will monitor their progress in English and manage their learning by organizing their notes, which bolsters their metacognition skills.

Ergo, adequate guidance should be given to high school students to educate them on different note-taking strategies and the effectiveness of their use in facilitating the L2 learning process. The execution of these procedures should be based on a principled and detailed educational curriculum. Syllabus designers and material developers should incorporate the instructions for effective listening skills and note-taking methods in the schools' lesson plans.

The results of the study might have some pedagogical implications for both teachers and learners in EFL contexts. One of the implications is that various note-taking techniques should be included and implemented in EFL educational settings. There are many ways teachers can engage students in learning and using note-taking techniques. For example, it is recommended that teachers provide appropriate materials about note-taking strategies in their educational contexts. Moreover, EFL teachers should encourage their students to

listen critically while taking notes.

Additionally, students must comprehend the significance of restating sentences in their own words, known as paraphrasing, while taking notes to economize time. Moreover, it is recommended that teachers instruct students on effective note-taking shortcuts, which involve using diagrams, abbreviations, lists, maps, and highlighting key points. By learning these shortcuts, students can write faster without falling behind the pace of the audio file.

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Appendix A: Debriefing Questionnaire

Dear students,
I would like to get a better understanding of your viewpoints on note-taking. Please, read each of the statements below and circle the number that best expresses your opinion about them.

5= Agree Strongly 4= Agree 3= neither Agree nor Disagree
2= Disagree 1= Disagree Strongly

No.	Statement	
1.	Taking notes helped me to answer the questions better than if I had not been able to take notes.	5 4 3 2 1
2.	Taking notes made it easier to remember the lecture information.	5 4 3 2 1
3.	I felt more at ease when I could take notes than when I could not.	5 4 3 2 1
4.	Taking notes made answering the test question more difficult.	5 4 3 2 1
5.	Taking notes helped me listen carefully to the lectures.	5 4 3 2 1
6.	Taking notes helped me to understand the lectures.	5 4 3 2 1
7.	Taking notes distracted me from paying close attention to the information in the lectures.	5 4 3 2 1
8.	I wanted more time to review my notes before answering the test questions.	5 4 3 2 1
9.	I found it difficult to listen to the test questions and at the same time to look for the specific information in my notes.	5 4 3 2 1
10.	I used my notes when answering the test questions.	5 4 3 2 1
11.	I had enough time to take as many notes as I wanted.	5 4 3 2 1
12.	The questions were about things I had written down in my notes.	5 4 3 2 1
13.	The lectures were too short for notetaking to help me very much.	5 4 3 2 1
14.	I remembered enough of the lecture to answer the test questions without taking notes.	5 4 3 2 1
15.	The lectures were too easy for notetaking to help me very much.	5 4 3 2 1
16.	Taking notes was important for me to get a better score on the test.	5 4 3 2 1
17.	The talks were too long for notetaking to help me very much.	5 4 3 2 1
18.	I relied on my memory more than my notes to answer the test questions.	5 4 3 2 1
19.	I have had training in developing notetaking skills in English.	5 4 3 2 1

Appendix B: Semi-Structured Interview Questions

1. Why do you think teachers should teach note-taking strategies to

- students during listening activities?
2. In your viewpoint, what are the advantages and disadvantages of Cornell's note-taking strategy?
 3. Did Cornell's note-taking strategy assist or interrupt you during the listening activities? How?
 4. In what ways, did the Cornell note-taking strategy help you in listening activities?
 5. Do you paraphrase key points of the listening activities while taking down notes in the Cornell note-taking sheet or do you write words verbatim?
 6. Do you regularly review your notes after lectures? How often do you take notes? (Always- sometimes- rarely- never). How useful is reviewing?
 7. Why do you take notes? What is the objective behind taking notes?
 8. While taking notes in the Cornell note-taking strategy, do you usually use abbreviations, symbols, lists, and diagrams?
 9. Do you think that students who do not take notes may forget the lecture contents easily and quickly?
 10. Are you able to take notes, keep up with the lecturer, & at the same time, understand the gist of the subject? (This question is to identify whether they are able to do multiple tasks without being distracted)
 11. Generally, do you think that Cornell's note-taking strategy facilitates the learning process?
 12. Do you normally have enough time to record as many notes as you wish?
 13. Have you ever faced any problems when taking notes in the Cornell note-taking strategy? What they were about?
 14. Generally speaking, how do you like the Cornell note-taking strategy?