

Saudi Students' Note Taking Strategies: Perceptions and Difficulties*

Nasser Alasmari

Department of English & Translation, University of Jeddah, Saudi Arabia

Abstract—The English language classrooms especially at the university level are based on the lecturing instruction method. This traditional method is commonly used despite its drawbacks. In order to avoid these drawbacks, learners develop certain techniques and strategies such as note taking. In fact, this strategy is defined as the act of recording newly exposed piece of knowledge or information in short notes to recall later. Despite the importance of note taking as an indispensable skill that university students should develop and master, the literature on the topic is still scarce especially in the Middle East which urges the need to conduct the current research whose main aim is to elicit the higher education students' attitudes towards the implementation of this skill in their learning process. In fact, 93 male students currently studying at the University of Jeddah as English language students participated in the current work through the use of a semi structured interview and the submission of their note taking drafts. Results indicated that these participants misperceive what note taking really means and thus do not know and use much of the micro skills of this strategy. The educational partakers should reconsider note taking in lectures and instruct learners to use it in an effective way as this would help them promote their learning especially in the case of second/ foreign language learning.

Index Terms—learning strategy, note taking, perceptions, Saudi learners, difficulties

I. INTRODUCTION

Learning is a lifelong process that is an essential means to advance in one's career in particular and in life in general. Given the changing feature in communities, cultures and personal lives, learning is the indispensable tool to effectively keep up with this change. Being a lifelong learner can help satisfy one's professional ambitions and achieve personal fulfillment. In fact, life learning consists in continuously developing new skills or acquiring new knowledge which, in turn, entails the building of other valuable skills that help at both personal and professional levels.

In general terms, successful individuals are those who are enthusiastic and motivated to learn something new every day - be it learning about cultures of others or learning another language. Being a bilingual or a trilingual can evidently help you reap a bunch of benefits and advantages both personally and professionally. The world is becoming increasingly interconnected and globalized and speaking more than one language can help people succeed in their careers and open up new paths for them to become parts of other communities. More importantly, being fully immersed in learning a language does not only mean learning the structures and the grammar rules but also means learning how to communicate with others and acquiring the necessary skills needed in the modern world. Among the demands of the 21st century modern education is the learner's autonomy which reflects the degree of his/ her motivation to process materials and understand the content. This applies to learning a second language where reaching a proficiency level in that language is subject to the development of certain skills which help these learners initiate, conduct, and manage the search for information to later process and store them. These skills are called learning strategies.

II. REVIEW OF THE LITERATURE

Schumaker and Deshler (1992) define the learning strategy as the way individuals organize and use a particular set of skills in order to learn content or accomplish other tasks more effectively and efficiently in both academic and non-academic settings. Bjork et al. (2013), on the other hand define it as a form of procedural knowledge (know-how) that can be used to boost learning performance. Research has shown that teaching people how to use effective learning strategies makes them achieve better results. Generally speaking, the learning strategies are divided into four main types namely; visual, auditory, read/write, and kinesthetic.

What is issuable, in this respect, are the wrong perceptions the students have towards particular learning strategies in terms of use and choice. To quote Bjork et al. (2013) "many students not only use relatively ineffective strategies (e.g., rereading), but believe that they are relatively effective" (p. 2). The current research particularly focuses on the note taking strategy. In fact, this focus is attributed to the aforementioned statement which holds true for this strategy as well as to the underestimation of note taking as it is commonly defined as the mere jotting down of as much said in the

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lecture as possible. Furthermore, the note taking strategy stems its importance from the bond it forms between the learner and the course materials. The learners who are unable to form a bond with the materials learnt cannot actually take notes effectively and efficiently (Eades & Moore, 2007). This work aims to give a clearer picture of how Saudi learners perceive this strategy. At a later stage and based on these perceptions, some pedagogical recommendations will be provided.

A. Note – Taking as a Learning Strategy

Most of people, particularly students, cannot remember every single word from a lesson or a lecture attended because they do not have a photographic memory. Thus, they resort to taking notes as a way of learning where they jot down the most important information to revise later. Note-taking refers to the students' writing notes in class and summarizing them in their own words through the use of different sources and high thinking order.

Scientifically speaking, individuals forget 33% of information they don't review within the limit of 24 hours. If, for instance, a lecture is complex or intricate, the fact of taking notes through writing down information helps you remember them later as this technique triggers the motor skills, touch sensation and visual cues to function in order to ease memory formation than mere listening or reading. As such, note taking is defined as the act of recording newly exposed to piece of knowledge or information in short notes to recall later. It is no longer perceived as a routine action for students; by contrast, note taking is viewed as a necessary skill nowadays. The learners do not record everything they learn in classrooms but select the information in notes understandable to them (Ozcakmak & Sarigoz, 2019). To put it in Piolat et al.'s (2005) words, note taking refers to the "short condensations of source material that are generated by writing them down while simultaneously listening, studying, or observing. Their function is to gather information distributed in a lecture, a book, or in any other situation that needs to be remembered" (p. 292).

Ward and Tatsukawa (2003) contend that the note taking skill is a valuable resource for reviewing and a procedure that helps students retain the recorded materials. The same authors list a number of advantages of the use of this skill. It helps reduce the time consumed in reproducing the notes. The concepts also remain in mind during note taking and also are re-encoded rationally in a way that helps learners think, apply and recall them easily later. In the same vein, Imran and Parveen (2018) enlarge on the importance of this skill as it helps the learners remember content and thus understand the different points in the lecture. They also add that note taking makes it easy for the learners to streamline, organize and review the content. This all facilitates the effective retention of information. However, Moos (2009) insists that the quality of the notes taken influences the students' performance positively or negatively and adds that taking good quality notes develops the leaning skills of the students as well as their memory knowledge for a longer time through memorization which helps express the retained knowledge in many different ways.

According to Ozcakmak and Sarigoz (2019), note taking is made up of two dimensions: recording and archiving. The former is meant to help learners remember the newly learned knowledge at a later time and thus avoid forgetting them momentarily. In the same vein, Bohay et al. (2011) mention the existence of a gap between the performance of the learners immediately after taking notes and a week later. The latter, on the other hand, has to do with organizing the taken notes to be used, operating on them and summarizing them. In a word, recording is strictly related to note taking while archiving means summarization. These two dimensions consist of consequential higher-level skills.

B. Note Taking as a Metacognitive Process

Metacognition is often defined as the reflection of an individual on his/ her own thinking. It describes one's ability to think about, comprehend, manipulate, and regulate how one is processing knowledge during learning. Metacognitive note taking, in particular, refers to planning, monitoring, and reflecting while participating in class activities. The process of note taking is often described as being metacognitive because it has to do with the information processing theory that involves the executive functions of planning for learning that refers to thinking about the learning process, managing one's output and understanding, and then assessing the learning process after an action is complete (Purpura, 1997). Similarly, Mueller and Oppenheimer (2016) argue that despite the common view that it is an easy skill, note taking is a process that necessitates both simultaneity and reaching difficult cognitive processes. In effect, during note taking, individuals should understand the content, decide whether this content is worth being noted and also restructure it into brief notes. Eades and Moore (2007) go further to claim that taking notes and revising them later do not only help learners recall the content in short and long terms but also reduce the forgetfulness phenomenon by forming permanent patterns in the individuals' minds. Purpura (1997) answered the question about the relevance of the metacognitive note taking skills to the learners by stating that this helps them become self-aware problem-solvers and responsible for their learning. When using metacognition during learning, these learners can be strategic about their approaches.

C. The Academic Attributes of Note Taking

According to Harrouz (2016), note taking is a competence that students especially at the university level should have as it doesn't only assist them recall academic information and materials but also improves their overall academic performance. In fact, a considerable amount of research results on the relationship between note taking and proficiency level was found to be positive. Crawford (2015), for example, examines the relationship between this skill and the test results of students from the general field of psychology and education and asserts that these two variables significantly correlate. He adds that the number of ideas recorded in notes positively affects the grades obtained in the exams.

Ipek (2018) lists a number of academic advantages that learners could reap when they take notes. She first argues that being engaged in note taking keeps the brain keenly making connections- and this is how learning takes place. She then adds that this process keeps learners motivated and engaged which, in turn, prevents them from becoming passive agents- a situation in which learning is almost impossible. The same author also insists that writing down questions and also reaction when taking notes gives armatures for future reflections and thus further learning. Imran and Parveen (2018) conduct a research whose subjects were 66 Saudi students at Prince Sultan University in order to measure the impact of taking notes while listening on understanding and recalling the information. The authors find a positive correlation between the two variables which confirms the findings of previous research.

Kiliçkaya and Çokal-karadaş (2009) also assert that effective note taking affects the learners' understanding of a given piece of knowledge. This skill challenges their cognition because it involves them in a complex process to take out, classify and choose the information in order to take helpful notes. The same authors claim that without this ability namely, effective note taking, learners are unable to come up with useful notes and thus their learning and academic performance will be negatively affected.

D. Note Taking Micro Skills

A review of the literature shows an almost common agreement on the importance of note taking for the students as it forces them to be engaged and focused in class and thus learning takes place. Psycholinguists pointed out that being actively involved with the topic by listening and then taking notes boosts the retention of the materials. Flowerdew (1994) mentioned the following 9 micro skills as the most important ones as perceived by the American faculty members in his study:

- a) *Identifying major themes or ideas*
- b) *Identifying relationship between major ideas*
- c) *Identifying the topic of a lecture*
- d) *Retaining information through note taking*
- e) *Retrieving information from notes*
- f) *Inferring relationships between information*
- g) *Comprehending key vocabulary*
- h) *Following the spoken mode of lectures*
- i) *Identifying supporting ideas of lectures* (pp. 12-13)

E. Perceptions and Challenges of Note Taking

Lewis and Reinders (2003) study the perceptions of second language learners of English on note taking. They came up with three main issuable points the informants mentioned. The first is that these subjects cannot write everything they want. They always feel there is still some missing information. Second, they had problems with their own handwriting which becomes far from being neat as the note taking requires being fast. Third, the same learners complained that they cannot immediately go back to the notes they took until just before the exams because of the shortage of time.

In another vein, Flowerdew and Miller (1992) raise the issue of the learners' experiences with lecture style lessons. Their subjects were B.A level students from Canton who attended lectures for the first time. These informants expressed their perplexity towards their lecture experience as they indicated its difference from their English classes at schools. They noted that the goal behind the lecture was not clear and thus their comprehension was affected. The same subjects complained about the speed of the lecture, new vocabulary words, and difficulty to concentrate. All this made it impossible to take notes effectively.

Barbier et al. (2006), on the other hand, studies the students' perceptions of note taking in a second language and argues that the learners found it difficult to take notes in the second language. Some of these learners resort to their native language to write words and abbreviations.

III. OBJECTIVES

Despite the importance of note taking as an indispensable skill that university students should develop and master, the literature on the topic is still scarce especially in the Middle East which urges the need to conduct the current research which aims to shed light on the different techniques used by Saudi learners when taking notes, to elicit their attitudes towards the implementation of this skill in their learning process and to investigate the difficulties they encounter while doing so.

Practically speaking, this work will be considered a helpful reference for both teachers and learners on the light of which they would take remedial measures to make note taking a more effective learning skill.

IV. RESEARCH QUESTIONS

- A. *What are the most common features of the notes taken by Saudi learners at the University of Jeddah?*
- B. *How do Saudi learners at the University of Jeddah perceive note taking?*
- C. *What challenges do Saudi learners at the University of Jeddah face when taking notes?*

V. METHODOLOGY

A. Subjects

A total number of 93 male students contributed to the conduct of this research. All these students are currently 2nd year students specialized in English and belong to the department of language and translation at the faculty of science and arts, University of Jeddah (Khulais branch). They are all non- native speakers of English from Saudi Arabia where the English language is the second language. Their age ranges between 20 and 22 where the average mean is 21. All the subjects volunteered to contribute to this research without any kind of pressure after being informed about its rationale and its objectives.

B. Instruments

Two data collection instruments were used in this work namely; the students' note taking drafts along with a semi structured interview with some of the same students. The first instrument is meant to give a clearer picture about the different features of the informants' note taking skill including the most frequently strategies used as well as the challenges faced. While the second is meant to decipher their views towards this skill and investigate the difficulties these students' encounter while taking notes. The semi structured interview includes 10 questions. In fact, this instrument is chosen because it is a flexibly conducted dialogue between the researcher and his/ her informants where the former can supplement follow up questions, some comments and probes that allow him to collect as much information as possible especially in terms of the participants' feelings, perceptions and beliefs which makes up the focus of the current research (DeJonckheere & Vaughn, 2019).

C. Data Collection Procedure

Three English lecturers were informed about the rationale behind the conduct of the research and they in turn were requested to inform their students about it in order to take photos of their note taking drafts immediately after the end of the lecture. The students were also instructed to write their names on the drafts before photos were taken. The total number of photos collected was 93, which reflects the number of the students who welcomingly accepted to contribute to this work. The second step was to invite some of these same students for a semi structured interview. Each of the three lecturers informed his students and arranged some appointments. The total number of the conducted interviews was 32. It is worth mentioning that the students had no idea about the collection of the photos until the end of the lecture in order to guarantee the credibility and the reliability of the results at later stages. In addition, the interviewed students voluntarily participated with no particular criterion apart from being among the ones whose note taking drafts were submitted.

VI. RESULTS AND DISCUSSIONS

TABLE 1
THEMATIC ANALYSIS RESULTS

<i>Note Taking Feature</i>	<i>Recurrence</i>	<i>Percentage</i>
Jotting down	93	100
Discourse markers	80	73
Abbreviations	10	11
Symbols	9	7
Layout	76	80
Paraphrasing	0	0
Sketching	0	0
Labeling	6	4
Outlining	65	75
Annotating	0	0
Translation	10	11

With reference to the table above, a thematic analysis of the students' drafts shows that all of them (100%) are trying to write down as much information as possible of what the lecturer said without any selection or focus on key points. This is clear through the high recurrence of discourse markers jotted down in their drafts (now, I will talk about, let's move to the next part...etc) as well as the clear lack of abbreviations (5%) or symbols (7%). Furthermore, the recurrence of such features as paraphrasing (0%), sketching (0%), labeling (4%), and annotating (0%) is minimal if it is not null. This shows the inability of the subjects to identify the major themes or ideas of the lecture as well as the relationship between them. The drafts of these subjects display their inability to comprehend key vocabulary or follow the spoken mode of the lecture. Such skills were categorized by Flowerdew (1994) as micro skills of note taking. The subjects in this work do not seem to master them. This goes in line with what stated by Savitri et al. (2019) as they find that their subjects were poor in note taking. This leads to the conclusion that one of the difficulties that the students suffer from is their ignorance of what note taking really means. This is made evident from both their drafts which show their inability to record important information in an accurate and concise way as well as their answers to question (1) on the interview about limiting note taking to the mere writing of as much of what the lecturer said as possible. This

ignorance may affect their performance in exams at later stages. The semi structured interview also shows that the informants have no particular idea about the note taking methods namely, concept mapping method, Cornell method, outline method, and charting method. This result is inconsistent with that of Savitri et al. (2019) who believe that these methods are the most commonly applied in academic settings such as universities. The results of the semi structured interview also reveal that the participants find note taking an easy process which contrast the common belief that this strategy is a difficult task which requires the accomplishment of intricate cognitive processes as well as simultaneity (Öz çakmak & Sarig öz, 2019).

In another vein, most of the participants perceive note taking as an important skill that helps them retain content and review for their exams. As articulated by two participants “of course, without my notes I cannot say I am ready for the exam”, “If I don’t have my notes this means I will not succeed”, the success for them is highly related to the notes they took. For this reason, the informants complained about the short time accorded to take notes. They believe that lecturers should give them more time to do so. The same results were found in Flowerdew and Miller (1992). However, this issue is almost self- explained in this research because the learners were trying to write down every single word in the lecture which is a difficult task to do in a limited time.

The semi structured interview with the subjects in this study also shows the difficulties they encounter when the lecturer doesn’t use Arabic (their other language) to explain certain points. In fact, translating words was one of the main features of the collected drafts. This is congruent with the results found by Barbier et al. (2006) whose informants cannot take notes when the subject they are studying is in the second language. The same results were also found by Ipek (2018). The author states that “note taking is a challenging activity for non- native speakers studying a foreign language (p. 206). The subjects informing this research also raise an important issue that has to do with the speed of delivering a lecture. “The teacher goes very fast in a way I cannot write down everything,” complained one of the participants. Even though “writing everything” is not one of note taking features, the speed of the lecture should be reconsidered. The same results were come up to by Al-Musalli (2015) who argues that note taking in lectures becomes more challenging for learners because of the speed of input.

Another issue that was recurrent through the subjects’ note taking drafts was the different blanks and empty spaces of many vocabulary words. With reference to the manuscript of the lecture, it was revealed that they were the spaces of newly introduced vocabulary items or long words with more than three syllables that are difficult to pronounce. This reflects on another kind of problem that has to do with the language proficiency level of the students.

VII. PEDAGOGICAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Given the proved connection between effective note taking and academic success as this skill improves memory and thinking, teachers should instruct their students on how to take good notes. Indeed, more time should be devoted to sensitize them about the importance of this skill as well to teach them the most effective ways of how to choose and use the note taking method. As stated by Zuckerman (2016), note taking affects the students’ performance and students achieve higher academic performance only when using structured and outlined notes. This makes note taking an indispensable academic skill that learners should develop and master in order to pursue their studies. In addition, it is such a challenging task for the non-native speakers learning a foreign language. For these reasons, these learners should be trained to acquire this skill in order to gain better educational outcomes. Guided note taking, in this respect, is the key to equip the learners with the needed skills to promote the note taking strategy.

The discrepancy between perception and practice of taking notes is clear in this research. Learners informing this work believe that note taking is important but have a wrong idea of what it actually means through their answers on the interview as it was reduced to the simple jotting down of what is said in the lecture. Accordingly, serious measures should be taken to bridge this gap through the introduction and the teaching of this skill in classrooms in a way to help learners develop and apply the most effective micro strategies of note taking that would help them boost their language learning.

The relationship between note taking and proficiency level, on the other hand, was spotted in this work through the recurrence of blanks and empty spaces in the drafts of the informants, which leads to hypothesize that students with higher English level outperform their counterparts who are less performing in the same language. Accordingly, more research is recommended to confirm or reject this hypothesis. In the same respect, the two variables namely, the quality of note taking and success in the subject exam should be studied to find out if a significant relationship exists between the two. This is deduced, here, through the learners’ insistence that note taking drafts are primordial for them to revise for their exams.

VIII. STUDY LIMITATION AND CONCLUSION

Despite its insightful results which would add to the scarce literature available on note taking especially in the Middle East, the current work still suffers from some limitations. The first of which is the limited number of the participants which, in turn, affected the amount of data collected. Had the number of the participants been bigger, deeper and more reflective results would have been found. This could have happened if more time had been allotted to the conduct of this research. The second limitation that can be mentioned is gender. In fact, all the participants were male and even though

this was done for cultural considerations as male and female students do not share the same settings, a replication of the data collection procedure could have been made in the female section and thus more credible and concrete results would have been reached.

In another vein and with the technological boom witnessed in recent years, note taking has changed as recording moved to a higher level. The students' methods of taking notes have transformed as they were observed taking pictures of the boards rather than using a notebook to write in a traditional way. The students are also using software installed on their gadgets. When comparing the classical way of note taking to the digital one, the notes taken digitally do not take much space, they can be shared via emails, and the information technology programs available. Such programs as Evernote, Simplenote, Endnote help taking notes everywhere and at anytime. Despite these advantages, taking notes digitally or classically is still a debatable issue. Bui et al. (2013), for example, claim that using computers to take notes is much more beneficial than using pens or notebooks while authors as Aragón-Mendizábal et al. (2016) and Mueller and Oppenheimer (2014) insist that the traditional way of taking notes help learners improve their grades especially when operations should be carried in abstract manners. They also added that using laptops to take notes can damage the learners' abilities to process and reconstruct information and thus learning in general terms. In this respect, Stacy and Cain (2015) recommend that if not taking is to be digital through apps for example, attention should be paid to the choice of the appropriate app in order to make sure that cognition is triggered in note taking process, reformation and summarization.

In short, note taking is perceived as an academic skill that is indispensable to improve one's learning. It is also regarded as a challenging skill especially for non- native speakers of English. It is highly recommended then to devote more time and focus of this underestimated skill if better learning is meant to be achieved. This skill should be underscored as it is commonly reduced to the mere writing down of as much information as possible in a lecture. As claimed by Piolat et al. (2005) note taking should be treated as "a complex activity that requires comprehension and selection of information and written production processes" (p. 291).

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Nasser Alasmari holds a PhD in Linguistics from UON, New South Wales, Australia. His areas of interest and research are in the cognitive and contrastive analysis and his main research area is cross-cultural perceptions which he formalised in a number of his current research on this subject. He has taught Applied Linguistics, Sociolinguistics, and semantics. He has presented papers at conferences both home and abroad, published articles and papers in various journals, and contributed as a reviewer in several language and linguistics conferences.