AN INVESTIGATION OF NOTE TAKING STRATEGIES USED BY EFL LEARNERS
A CASE STUDY OF FIRST YEAR UNIVERSITY STUDENTS AT THE DEPARTMENT OF ENGLISH-SETIF 2

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Abstract:

The nature of teaching at University requires students to use higher level study skills than those they used at middle and high school. Note taking, particularly, is very important to learn from lectures in the field of higher education. First Year students of English at Setif 2 University are expected to use efficient note taking during lectures with little experience in this skill. The aim of this study is to explore whether students are using efficient note taking strategies during lectures. For that, three research methods were employed under the approach of mixed methods research. These are: questionnaire, observation, and document analysis. Findings reveal that students do not use efficient strategies to promote note taking. Therefore more extensive instruction on note taking should be administered.

key words: Note taking, note taking strategies, lectures.

Introduction:

Concerning the EFL (English as a foreign language) context, little research on note taking in the second language (L2) has been done. Consequently, most note taking materials are designed with learners of native language (L1) in mind. In addition, they may even suggest some hypotheses for investigation on the realm of L2 note taking (Dunkel,

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1988). Similarly, the Algerian context also lacks sufficient research on note taking despite this latter's importance in academia. While schools rarely depend on note taking as a learning skill, universities rely on it heavily. As a result, university students are expected to learn from lectures using note taking with no prior training in this skill during their school lives, which is a challenge that may cause many learning obstacles for students in general and freshmen in particular due to lack of experience, and may result in the development of inefficient note taking strategies. Therefore, this study attempts at investigating First Year students' note taking strategies and assessing their degree of efficiency as learning skills within the context of the University of Setif -2-.

The purpose of this study is to inspect whether First Year university students of English have sufficient note taking skills for efficient lecture-related learning. In order to carry out this explorative research, the following research question is asked:

Do students use efficient note taking strategies?

This study was prompted by the persistent behavior of many students borrowing notes from their classmates to prepare for exams. This behavior necessarily demonstrates the meagerness of students' notes taken during lectures and how much these notes lack the ability to help students remember information taught before. In addition, the importance of note taking skills as proven by many studies (e.g., Dunkel et al. 1989, Otto 1979, Robertson 1984,) calls for more research to be conducted on this area in order to increase language learners' note taking abilities and consequently, their performance in exams and language acquisition.

Findings of the present study are hoped to point to some of the students' needs in the English department in terms of learning strategies. The subjects' responses to the questionnaire as well as data gathered from the observation and students' course notes may indicate some of those needs. In the light of data collected from these instruments, one may spell out a framework for better instruction based on the needs of students.

LITERATURE REVIEW

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As mentioned in Makany et al. (2008: 1), according to Dror (2007), note taking is one of the first and most established cognitive technologies. It is considered a complex human behavior which underlies a number of mental processes involving: acquiring, mentally representing, selecting, and understanding the continuous flow of

incoming new information; as well as fitting this new knowledge with older one by continuously revising and updating the latter (Piolatet al, 2005). This mental operation must be ongoing during the whole lecture while students write down their understanding and at the same time, remain concentrated on listening to the lecturer.

According to a number of researchers (Kiewra. 1989; Dunkel. 1988; DiVesta and Gray. 1972) there are two functions in note taking: The encoding function and the storage function. The first function refers to students' awareness during note taking and the second refers to notes' function as external information storage. These functions make note taking beneficial for the process of learning in two different aspects: learning by indulging in the operation of note taking (with all its cognitive and applied procedures) and learning 'externally' from the notes taken which consist of data accessible anytime for the convenience of students.

The quality of notes taken also has a role in deciding the performance of students. However, with the challenge of recording notes while keeping up with listening, the effectiveness of students' notes can be lacking. Laboratories have measured the average speed of speech to be 2-3 words by second, while the average speed of writing to be 0.2-0.3 words by second. Consequently, students' note-taking efficiency is only around 20–40% in a typical lecture situation (Kiewra, 1985a).

There is a surprising scarcity of information on how note-taking affects EFL learners' learning and performance in the target language. Non-native speakers experience a greater challenge than native speakers in note-taking activities during a lecture given in English. Studies have shown that EFL students suffer shorter short-term memories in English and experience more difficulties comprehending what they hear (Peverly et al., 2007). Therefore, the most notable advantage of taking notes for EFL students is the convenience of capturing unfamiliar names, terms and ideas in text to memorize and later comprehend (LeBauer, 2000). After studying 78 foreign EFL students from an American university, Huang Jinyan (2006) found that the majority (80.8%) of participants agreed that the academic skill of note taking in class was beneficial with regards to improving comprehension and gaining information. Lincoln and Rademacher (2006) investigated the learning styles of EFL students in Northwest Arkansas by administering a learning style questionnaire. One third of the participants in a 69 student set chose note-taking as their favorite learning method.

Concerning note taking in the context of the Algerian University, Missoum (2007) conducted an exploratory research on the efficiency of

note taking strategies and its relation to lecture comprehension. The study was conducted on second year students of English at the University of Blida and lasted two consecutive years. Findings showed that, although there was a correlation between note taking and lecture comprehension, the subjects' notes indicated low standards of achievement on taking notes from academic lectures. The notes' efficiency scores were predominantly low. The subjects often resorted to a verbatim note-all strategy. In addition, there was proof of illegible notations, inconsistent and unclear abbreviations and symbols, little structure and no indication of hierarchy.

EFL materials writers and curriculum developers believe note taking to be an important skill for L2 leaners to develop as evidenced by the number of published textbooks targeted at developing EFL learners' note taking skill. Although the content, focus, and approach of these books vary, they incorporate many of the *axioms* of good note taking in their instructional designs. Many of these axioms have been framed from intuitive beliefs and have been set forth in study guides and articles in the literature as important strategies to note taking. These strategies are generally divided into three phases. Strategies used prior to attending the lecture, strategies used during the lecture, and strategies used after the lecture.

Consequently, due to its importance in higher education, note taking should have a respected position in the curriculum. Following Boch and Piolat's (2005) extensive research in this domain, its instruction should enfold three important elements. First, comprehension through note taking can be taught through summarizing. Second, producing notes should focus primarily on format and organizational devices. Last but not least, the conscious management of the activity of note taking as a whole can be reinforced by exploring the metacognitive knowledge of students through devices such as questionnaires.

METHOD AND PROCEDURES

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Research approach and design:

This case study follows a mixed methods approach with an exploratory purpose and a convergent parallel design. According to Neville (2007) exploratory research is undertaken when few or no previous studies exist. The aim is to look for patterns, hypotheses or ideas that can be tested and will form the basis for further research. The

design adopted is called a convergent parallel design (or a convergent mixed methods design). "The purpose of this design is to simultaneously collect both quantitative and qualitative data, merge the data, and use the results to understand a research problem" (Creswell, 2012: 540). In the process of data collection, quantitative and qualitative data are collected simultaneously, and at the data analysis stage, the researcher compares (triangulate) the results from quantitative and qualitative analyses and determine if the two databases produce similar or different results.

Population and sampling:

The population for this study consists of First Year students at the department of English at University of Setif 2, which encompasses: 56 males, 238 females, and 42 repetitives. Eliminating 70 dropouts from the total number of students results in a remaining 266, which consists of the real size of the population.

The sampling method used is multi-sampling. For qualitative data collection, purposeful sampling technique is used. Cohen et al. (2007) state that purposeful sampling allows the researcher to pick participants who possess particular characteristics being sought; in this case, participants who attend lectures which require note taking. Based on the following requirements: the teacher presenting the course orally, the teacher abstaining from distributing handouts (or at least does not provide handouts for every lecture) and the teacher asking students to take notes, three groups (Group A2, A5, and B6), each taught by one teacher of the module of Civilization, were selected.

On the other hand, for quantitative data collection, convenience sampling technique was used. Convenience sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand until the sample reaches a desired, designated size (Connaway and Powell, 2010). Since one-fifth of the population is agreed upon to be an adequate sample size by the institution of Setif University 2-Department of English, approximately one-third (40%) of the population was selected. Thus, 106 subjects were selected conveniently.

Instruments:

The observation:

Classroom observation is used in this study as a primary data collection tool to describe the learning milieu as well as students' behavior concerning note taking. The observation used in this study is a non-participant observation made under natural, non-controlled conditions. The researcher makes use of a structured observation,

recorded categorically using a partially adapted checklist. The checklist was designed by a published thesis of Missoum, M. (2007) with a similar theme on note taking, and is adapted because it falls in line with the characterization of academic lectures presented in the review of the literature. The observation scheme, thus, consists of two sections: The first focuses on the lecture content and codes verbal, paralinguistic and non-linguistic features of the observed lecture; while the second section is devoted to students' contribution to the discourse of the lecture (questions, clarification requests, comments, etc.) as well as their visual note taking behavior. In order to describe the observed lessons, field notes were used to transcribe the lectures. Transcripts included a neutral description of the lecture characteristics as observed by the researcher.

The questionnaire:

In order to crosscheck and complete data gathered from the qualitative data collection tool, a questionnaire was distributed. The questionnaire used in this study was also partially adopted from Missoum‟s (2007) study on note taking at the University of Blida. It consists of two general sections: background information on students‟ familiarity with note taking consisting of three items answered with „yes‟ or „no‟, and 23 items measured on a five-point Likert-type scale ranging from „never‟ to „always‟. The 23 items consist of questions that measure students' note taking strategies. The questionnaire was anonymous and prepared at the same time as the observation.

The reliability of the questionnaire used in this study was tested by measuring Cronbach Alpha using SPSS; in which a reliability score is expressed numerically as a coefficient. A coefficient score is ideally 1.00 if a test is perfectly reliable. A high coefficient of at least 0.70 is required to indicate an acceptable degree of reliability (Baumgartner et al., 2002). According to Kline (1999), although the generally accepted value of 0.80 is appropriate for cognitive tests such as intelligence tests, for ability tests a cut-off point of 0.70 is more suitable (cited in Field, 2005: 1). For this study, Cronbach Alpha is equal to 0.722, which is considered a good reliability score for this kind of research.

Table 1. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items

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Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0,722	0,738	48

Additionally, the questionnaire underwent a pilot test to measure time and wording. The procedure was performed to check whether all questions were understood by the subjects and whether the time needed to answer them was appropriate. The pilot test was executed with 10 randomly selected subjects from the population with the presence of the researcher to ensure a 100 percent return rate. Results showed that the questionnaire was relatively long, taking from 10 to 20 minutes to answer. Also, subjects showed some difficulty understanding certain words. Accordingly, the questionnaire was modified to better suit the population selected by decreasing the number of questions from 30 to 24 and moderating the vocabulary used.

Document analysis:

The documents used in this study are personal documents, which consist of students' notebooks of the module of Civilization. Bowen (2006) argues that document analysis is an important research tool in its own right and is an invaluable part of most schemes of triangulation. The researcher opted for a document analysis because direct data were needed to achieve a thorough investigation of the subjects' note taking strategies.

Analyzing documents incorporates coding content into themes. Thus, Document content is categorized into themes based on a number of note taking characteristics: Organizational Features, their quantity and quality (clarity of meaning and consistency); outlining: Making explicit macro structure and embedding (hierarchy); Abbreviations, their quantity and quality (clarity of meaning and consistency); Diagramming; Numbering; Symbols, their quantity and quality (clarity of meaning and consistency); Titling; Evidence of examples; Highlighting: indenting, underlining, circling, etc; Use of margin; Reduction of input; And personal notes. This model of document analysis is partially adapted from the study of Missoum, M. (2008) on "comprehension and note taking strategies", which is, in turn, partially adapted from notes quality indexes by Rost1994, King1994, Chaudron et al.1994, Anderson (1980) cited in Dunkel & Davis(1994: 61) and Hansen (1994).

RESULTS AND DISCUSSION

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First section (students' background)

The first section in the questionnaire investigates students' background knowledge and familiarity with the theme of note taking. It also shows to what degree the research problem applies on the sample. As shown in the table below, the biggest number of students, which is made up of 89 out of 100, answered that they have studied note taking at University; this constitutes 95,7% of the cases. On a close interval, 24,7% responded that they have studied note taking by themselves; while 23,7% responded that they have studied note taking during secondary or high school. Thus, it is safe to conclude that when it comes to note taking, University is the major source of learning for students. Apart from University, few learners rely on self-study for note taking. This proves the existence of the research problem.

Table 2.1. Case summary of $background knowledge

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
$Backgoud	93	93,0%	7	7,0%	100	100,0%

a. Dichotomy group tabulated at value 1 (Yes).

Table 2.2. Frequencies of $background knowledge

		Responses		Percent of Cases
		N	Percent	
Studied note taking:	During secondary and high school	22	16,4%	23,7%
	At university	89	66,4%	95,7%
	By oneself	23	17,2%	24,7%
Total		134	100,0%	144,1%

Second section (students' strategies)
Question 1:

Question one is a multi-response question, which requires students to choose one category (1 to 5) for each item ("lecture preparation by reviewing previous notes" and "lecture preparation by reading about the topic"). According to the table below, most answers are concentrated around the middle part of the scale, while the edges of the scale witness relatively lower percentages.

Table 3. $Lecture preparation

		Responses		Percent of Cases
		N	Percent	
Lecture preparation	Never	14	7,0%	14,0%
	Rarely	42	21,0%	42,0%
	Sometimes	74	37,0%	74,0%
	Often	41	20,5%	41,0%
	Always	29	14,5%	29,0%
Total		200	100,0%	200,0%

Findings from the questionnaire show that the majority of students use strategies related to note taking occasionally. Techniques used to prepare for lectures, such as reviewing previous notes and reading about the topic, are used from time to time. This inconsistency in preparing for lectures does not serve good note taking during lectures.

Questions 2, 3, 4, and 5:

Questions two to five investigate students' way of writing down notes from lectures. Based on the statistics displayed below, the mean of responses on the four questions spreads from 3,14 to 3,97. This shows that the concentration of answers is higher on the categories of "sometimes" and "often".

Table 4. Writing notes

		Writing full sentences from lectures (2)	Using personal abbreviations (3)	Writing information in one's own words (4)	Using regular abbreviations (5)
N	Valid	99	98	97	99
	Missing	1	2	3	1
Mean		3,32	3,14	3,72	3,97
Median		3,00	3,00	4,00	4,00

Mode	3	3	4	5
Percent				
Never	6%	13%	2%	3%
Rarely	20%	17%	14%	7%
Sometimes	32%	29%	21%	21%
Often	18%	21%	32%	27%
Always	23%	18%	28%	41%

Students use note taking strategies inside the classroom only every so often. Techniques concerning writing notes, such as the use of abbreviations and one's own words, record the highest utilization among students. Nevertheless, a considerable percent of students (31% to 59%) record that they do not often use these techniques. Document analysis confirms the questionnaire findings, as it reveals that more than half of the examined notebooks did not contain evidence of extensive abbreviations and symbols.

Questions 6, 7, 11, 12, 13, and 14:

To investigate students' strategies regarding the selection of notes during lectures, six questions were asked. Questions six, seven, eleven and fourteen examine efficient note selection techniques, while questions twelve and thirteen examine inefficient note selection habits. Looking at the statistics, it appears that among the efficient techniques, "paying attention to and noting what is written on the board" tops the list with a mean of 3,98 and 45% responses on the category of "always". Next in order comes the technique of "Deciding about the importance of the information while taking notes" (mean=3,61, and a percentage of 34% on "sometimes"), followed by "Paying more attention to certain words and expressions" (with a mean of 3,56 and close percentages on both "sometimes": 33% and "often" 32%). Finally, on a close interval to the precedent techniques, "Distinguishing main from secondary points" scores a mean of 3,34 and a highest percentage of 40% on the category of "sometimes".

The inefficient note selection habits, on the other hand, have recorded comparatively high measures. "Trying to understand all new words" scored a mean of 3,88 and a highest percentage of 33% on the "always" category". "Paying attention to everything during a lecture" recorded a mean of 3,71 and a highest percentage of 31% on the category of "always". Therefore, with the exception of the efficient technique number seven, both inefficient habits twelve and thirteen have scored higher than the remaining three efficient strategies.

Table 5.1. Selection of notes (1)

		Deciding about the importance of the information while taking notes (6)	Paying attention to and noting what is written on the board (7)	Distinguishing main from secondary points (11)
N	Valid	99	100	97
	Missing	1	0	3
Mean		3,61	3,98	3,34
Median		4,00	4,00	3,00
Mode		3	5	3
Percent		5%	2%	3%
	Never	8%	7%	16%
	Rarely	34%	27%	40%
	Sometimes	26%	19%	21%
	Often	26%	45%	17%
	Always			

Table 5.2. Selection of notes (2)

		Trying to understand all new words (12)	Paying attention to everything during a lecture (13)	Paying more attention to certain words and expressions (14)
N	Valid	96	97	90
	Missing	4	3	10
Mean		3,88	3,71	3,56
Median		4,00	4,00	4,00
Mode		5	5	3
Percent		1%	5%	2%
	Never	7%	10%	8%
	Rarely	28%	24%	33%
	Sometimes	27%	27%	32%
	Often	33%	31%	15%
	Always			

Among note selection strategies, students use the technique of noting what is written on the board the most. Other techniques which involve paying attention to important ideas and expressions are used occasionally. Students express that they use these techniques mainly to detect key words that are essential to understanding the lecture. Note selection also helps students avoid redundancy and focus on important content. To be able to use selective strategies efficiently, students have to pay attention to lecturers' cues. According to King (1994), more often than not, teachers provide signals to students when giving important information. The most obvious signal depended upon by students is

paying attention to what is written on the board. To back up their note selection skills, students should use different other strategies like looking for key words and avoid trying to catch all words and ideas. Unfortunately, the majority of students stated that they pay attention to everything during a lecture and try to understand all new words. The use of these inefficient strategies greatly hinders students' note taking capacity as it drains their mental attention.

Question 15, 16, and 17:

Three questions were devoted to investigate the note taking strategy of lecture organization and structure. The mean of responses to these questions ranges from 2,95 to 3,62 with the highest percentage scores on sometimes and often.

Table 6. Organization and flow of the lecture

	Guessing the content of the lecture from title and introductory sentences (15)	Thinking about the organization of lecture (16)	Finding connections between ideas in the lecture (17)
N Valid	97	97	96
Missing	3	3	4
Mean	3,32	2,95	3,62
Median	3,00	3,00	4,00
Mode	3	3	4
Percent	5	7	4
Never	16	29	6
Rarely	34	34	32
Sometimes	27	16	34
Often	15	11	20
Always			

Students seem to use these techniques conservatively. Most students think about the content and organization of the lecture and try to find connections between ideas once in a while. On the other hand, document analysis showed that many students make use of organizational features like titling and numbering. While organizing notes, it should not be done in an excessive way that might slow students from taking notes, students need to adapt a coherent and logical way to take notes in order to facilitate information retention later on. This is best done by following the lecturer's structural cues as argued by Longman and Atkinson (1999). Thinking about the organization of the lecture and trying to figure out the lecturer's structural cues increases students' mental involvement in the learning process and, consequently, raises note taking efficiency.

Question 18:

How often do you mentally summarize some of the information presented?

Answers to this question reveal students' capacity of staying attentive and interested during the lecture. Answers show that more often than not, students summarize information presented in lectures. As shown in the table below, The mean (3,58) and median (4) confirm the regularity of this strategy's frequency among students.

Table 7. Mentally summarizing some of the information presented

		Mentally summarizing some of the information presented (18)
N	Valid	95
	Missing	5
Mean		3,58
Median		4,00
Mode		3
Percent	Never	3
	Rarely	10
	Sometimes	34
	Often	25
	Always	23

Good note takers should be efficient listeners who are able to synthesize relevant lecture information while listening. In her study of EFL note taking, Dunkel (1988: 87) found that "achievement on the test of lecture information recall was not related directly to the quantity of the notes. However, the terseness of notes, or encoding the informational content of the lecture in concise and compacted notations appeared better predictor of test performance". The questionnaire shows that most students use this strategy moderately. However, they also write full sentences from lectures.

Question 19:

This question investigates making connections between newly-learned information and background knowledge. As shown in the table below, most students respond that they use this strategy with varying frequencies. Students who answered with "always" constitute the biggest percentage. Having a mean of 3,73, a median of 4, and a mode of 5 proves that the frequency of using this strategy among students is higher than average.

Table 8. Finding relations between the lecture and background knowledge

		Finding relations between the lecture and background knowledge (19)
N	Valid	96
	Missing	4
Mean		3,73
Median		4,00
Mode		5
Percent		
	Never	1%
	Rarely	13%
	Sometimes	28%
	Often	23%
	Always	31%

With a relatively high frequency, students try to relate their background knowledge to newly learned information. Researchers reported that prior knowledge strongly impacts the quantity and quality of produced notes. According to Mosleh and Baba (2013: 10), "people with adequate background knowledge generated more external connection between lectures". Thus, the more students relate their general knowledge to the lecture content, the more they build mental links and, consequently, reflect that by generating external connections between information through notes. This strategy highlights the complexity of the encoding function of note taking as well as showcases its efficiency in increasing the recollection of information.

Questions 20, 21, and 22:

In order to take good notes, students should cooperate in building the knowledge they are recoding. Three techniques were investigated to gain knowledge about students' participation in the learning process. As shown in the table below, the use of all three techniques is below average, with a mean of 2,67 to 2,84.

Table 9. Students' participation

		Asking a question (20)	Asking for repetition (21)	Giving new example (22)
N	Valid	99	96	97
	Missing	1	4	3
Mean		2,75	2,67	2,84

Median		3,00	3,00	3,00
Mode		3	3	3
Percent	Never	18%	16%	7%
	Rarely	24%	29%	27%
	Sometimes	34%	30%	44%
	Often	11%	19%	13%
	Always	12%	8%	6%

Students reveal that their participation in lectures is below average. Most students infrequently ask questions, ask for repetition, or give examples. In addition, only one observation out of four recorded students' participation during lectures, while the remaining three registered students' non-initiation of participation. Like writing notes to self, being active in the learning process is highly recommended by note taking guides, as it enables students to be part in building lecture knowledge. Yet, students display poor employment of this strategy.

Questions 8, 9, 10, and 23:

The last note taking strategies investigated among students concern those used after the lecture. Four questions were asked on students' habits about completing, rewriting, and reviewing notes. Overall, students' performance on note taking strategies after lectures appears to be lower than average for a mean that expands from 2,72 to 2,99, With the most frequently faced problem during this stage is dealing with "incomplete notes", it is understandable that The most used technique is "comparing and completing notes with classmates".

Table 10. Writing and reviewing notes after the lecture

		Comparing and completing notes with classmates (8)	$Difficulty in reading/rewriting notes (9)	$Completing notes using different resources (10)	Reviewing notes right after class (23)
N	Valid	98	98	97	96
	Missing	2	2	3	4
Mean		2,99	2,22	2,85	2,72
Median		3,00	2,00	3,00	3,00
Mode		3	1	3	2
Percent					
	Never	11%	41,7%	26%	15%
	Rarely	20%	16%	11,1%	29%
	Sometimes	38%	26%	27,5%	26%
	Often	17%	10,8%	20,4%	20%
	Always	12%	5,6%	14,3%	6%

Table 11.1. Rewriting and completing notes (1)

		Difficulty in reading/rewriting notes due to: illegible handwriting	Difficulty in reading/rewriting notes due to: incomplete notes	Difficulty in reading/rewriting notes due to: unclear abbreviations
N	Valid	95	97	96
	Missing	5	3	4
Mean		1,83	2,65	2,19
Median		1,00	3,00	2,00
Mode		1	3	1

Table 11.2. Rewriting and completing notes (2)

		Completing notes using: teacher's handouts	Completing notes using: other students' notes	Completing notes using: reading material on the topic
N	Valid	92	94	94

Missing	8	6	6
Mean	3,37	2,62	2,55
Median	4,00	3,00	3,00
Mode	5	1	3

These strategies of editing and reviewing notes right after the lecture reinforce the storage function of note taking. According to Dunkel (1988: 14), "The importance of the external storage function of note taking is recognized by those who postulate that the notes serve as an external repository of information which permits later revision and review to stimulate information recall". Many studies conducted by Hartley (1983) and/or by Kiewra (1985a) showed that, more often than not, students who review their notes demonstrated better performances than those who did not. Thus, students' infrequency in editing and reviewing their notes can be seen as a crucial factor in diminishing their learning capacity.

Conclusion:

The questionnaire revealed that the overall frequency of the usage of different note taking strategies by students is medium. Generally speaking, students use note taking strategies "sometimes". On the other hand, the observation showcased the different lecturing styles of teachers, and their influence on students' behavior. Three teachers were observed, and every one of them used the friendly-note-taking strategies in their lectures differently. In fact, it was witnessed that the more the teacher used those strategies, the more they influenced his/her students to take notes and to use learning strategies that are helpful to note taking. Finally, Document analysis was conducted on seven notebooks and was used to examine students' note taking strategies from a direct perspective. This last method showed that students use strategies with different extents. However, it was found that the majority of students do not use those strategies with a sufficient degree.

Limitations of the study:

The present study underwent a number of limitations that need to be acknowledged. Due to time constraint, the study did not investigate the research problem from the perspective of lecturers. In addition, owing to the student strike in the second semester, only four observation sessions were implemented. Due to lack resources, the sampling technique used for the questionnaire was convenience sampling. As discussed in the Methodology Chapter, although a relatively big sample was selected (third the population), simple random sampling would have

been a better sampling technique to gain more generalizable results. In addition, the sample for document analysis could have been bigger if more students cooperated with the researcher. Nonetheless, more than one research tool was used to compensate for each other's drawbacks.

Recommendations for further research:

More research is needed to supplement the present study and provide a better understanding of the issue researched. To help offset the study limitations, future research should employ larger and more randomized samples to help improve the generalizability as well as decrease any bias in the design. Also, including an investigation of the problem from the perspective of teachers is highly advised. To make stronger implications, an experimental study investigating the relationship between note taking and academic achievement of EFL students is recommended. On top of that, further research is needed to study the issue in other departments of English throughout Algeria in order to improve learning/teaching in higher education.

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