

In the Name of Allah, Most Gracious, Most Merciful

Sudan University of Science and Technology
College of Graduate Studies
College of Languages

**Investigating the Effectiveness of Intentional and Incidental Vocabulary
Learning Strategies**

تقصي فعالية استراتيجيات التعلم المقصودة والعرضية لمفردات اللغة الانجليزية

**A thesis Submitted in Fulfillment of the Requirements for Master
Degree in English Language (Applied Linguistics)**

Prepared by:

Abbas Babiker Ahmed Dirwish

Supervised by:

Dr Mahmud Ali Ahmed Omer

2018

آيات من القرآن الكريم

قال الله تعالى:

{هُوَ الَّذِي خَلَقَ لَكُمْ مَّا فِي الْأَرْضِ
جَمِيعاً ثُمَّ اسْتَوَىٰ إِلَى السَّمَاءِ فَسَوَّاهُنَّ
سَبْعَ سَمَاوَاتٍ وَهُوَ بِكُلِّ شَيْءٍ عَلِيمٌ
{29/2} وَإِذْ قَالَ رَبُّكَ لِلْمَلَائِكَةِ إِنِّي جَاعِلٌ
فِي الْأَرْضِ خَلِيفَةً قَالُوا أَتَجْعَلُ فِيهَا مَنْ
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بِحَمْدِكَ وَنُقَدِّسُ لَكَ قَالَ إِنِّي أَعْلَمُ مَا لَا
تَعْلَمُونَ {30/2} وَعَلَّمَ آدَمَ الْأَسْمَاءَ كُلَّهَا
ثُمَّ عَرَضَهُمْ عَلَى الْمَلَائِكَةِ فَقَالَ أَنبِئُونِي
بِأَسْمَاءِ هَؤُلَاءِ إِنْ كُنْتُمْ صَادِقِينَ {31/2}
قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ {32/2}

صدق الله العظيم

سورة البقرة (29-32)

Dedication

I dedicate this work to my mother, to the Soul of my deceased father, to my brothers and sisters, to my life partner whom I live for; Lujain and Mohammad and to all my relatives in the Sudan

Acknowledgement

Praise be to Allah, the Almighty who enabled me to achieve this academic task.. I express my gratitude and thankfulness to my supervisor Dr. Mahmud Ali Ahmed for his fruitful guidance, valuable insights and thoughtful comments that led to the achievement of this study. My thankfulness extends also to my elder brother Dr. Adil Al-Ogab for his continuous support and his fruitful and priceless advice. Thanks and gratitude are also delivered to Dr. Abbas Mukhtar at Sudan University, College of Languages who provides me with priceless information and valuable insights. I also express my gratitude and thankfulness to my friend, Elnour Khamgan for his great efforts and support which help in the completion of this study.

Abstract

This study aims at exploring and investigating the effectiveness of intentional and incidental vocabulary learning strategies. The study highlights the significance of the above mentioned strategies of learning vocabulary that will enhance the students' performance in English language. The study hypothesizes learners can easily acquire vocabulary intentionally when they interact with each other and the study also hypothesizes that incidental vocabulary learning is effectively done via an ample exposure to the same word in a various texts. In addition to the study hypothesizes that the use of Arabic language as a medium of instruction help further in improving students understanding of English texts. The study adopts a descriptive and analytical method to collect and analyze data. The questionnaire was used as a tool for data collection and for the verification of the above hypotheses, and then the data was analyzed with [SPSS] programme. Eventually the analysis of data has revealed that learners who acquire vocabulary communicatively will score significantly high and can easily acquire vocabulary intentionally when they interact with each other. The analysis has revealed that vocabulary pronunciation is apparently acquired through performing dialogues as well as English systematic classes, besides exposing learners to English – English medium is an interested

strategy in acquiring and using vocabulary effectively. Translation into Arabic is sometimes inevitable. On the light of the above mentioned results, the study also recommends that visual aids should be used effectively in learning vocabulary intentionally, also learners have to be motivating through inserting new words in a variety of situations. Moreover, Learners have to use English – Arabic dictionaries to acquire both meaning and pronunciation and the use of Arabic translation should be minimized as possible and can be adopted only when it is inevitable.

المستخلص

هدفت الدراسة لإكتشاف و تقصي فعالية تعلم مفرد اللغة الإنجليزية بإتباع إستراتيجية التعلم القصدية والإستراتيجية العرضية لإكتساب مفردات اللغة الإنجليزية. وتعتبر الدراسة مهمة لإهمية مفردات اللغة الإنجليزية التي تمكن داري اللغة الإنجليزية من استخدام اللغة كما تعزز أدائهم أيضا . إفترضت الدراسة أن طلاب اللغة الإنجليزية عندما يتفاعلون مع بعض بطريقة مقصودة سيكتسبون مفردات اللغة الانجليزية بسهولة وان التعلم العرضي لمفردات اللغة الانجليزية يحدث بفعالية عند عرض المفردة في نصوص مختلفة. ايضاً افترضت الدراسة أن استخدام اللغة العربية بصورة أقل يساعد علي فهم نصوص اللغة الإنجليزية . استخدمت الدراسة المنهج الوصفي لجمع ورصد المعلومات التي تتعلق بالدراسة ومن خلال استخدام الاستبانة كوسيلة لجمع ورصد المعلومات وبعد تحليل هذه البيانات عن طريق برنامج التحليل الإحصائي (SPSS) توصلت الدراسة أن الطلاب الذين يكتسبون مفردات اللغة الإنجليزية من تواصلهم مع البعض سيحرزون درجات أعلى بشكل ملحوظ. وتفاعل الطلاب مع بعضهم البعض يمكنهم من إكتساب مفردات اللغة بسهولة بالإضافة إلي إكتساب النطق الصحيح لمفردات اللغة بشكل ملحوظ من خلال ممارسة الحوارات ودروس اللغة الإنجليزية بشكل منتظم. علاوة علي ذلك إستخدام اللغة العربية من حين لآخر للطلاب الذين يخضعون لمنهج محدد وإستخدام اللغة الإنجليزية كوسيلة لتوصيل المادة هي إستراتيجية محببة لإكتساب وإستخدام المفردات بصورة فعالة وعلي ضوء النتائج التي توصلت إليها الدراسة توصي الدراسة بإستخدام الوسائل البصرية بفعالية لتعلم مفردات اللغة الإنجليزية بشكل مقصود و تحفيز الطلاب عن طريق إدخال كلمات جديدة في مواضع متنوعة و استخدام قاموس (إنجليزي - عربي) لإكتساب معني ونطق الكلمات بكما توصي الدراسة بتقليل الترجمة الي العربية بقدر الإمكان ويمكن إستخدام الترجمة عند الضرورة.

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CHAPTER ONE

INTRODUCTION

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INTRODUCTION

1. Back ground of the Study:

To communicate effectively, a substantial amount of vocabulary words is necessary for English first language and English second language learners. The number of words learners need to be capable of using another language (second language) vary. (Coady, 1997; Huckin & Coady, 1999) suggest that learners need at least 3,000 word families, and 5,000 to 10,000 word families for university-level texts to achieve accurate contextual guessing, while chmitt & McCarthy (1997) claim that a learner knows 80 per cent of the words in a text with a vocabulary size of 2,000 words. Cristina (2010) argues that it takes many years of hard work for a second-language speaker to get to native-speaker level, and goes further stating that “Some linguists estimate that ducated native speakers could have an active vocabulary of between 8,000 and 10,000 words. Good second- Language speakers might have an active vocabulary of 3,500 words. That is quite a difference & quot; (p. 171) Nation (2001: 20) goes further claiming that language users probably need a vocabulary of 15.000 to 20.000 words “to read with minimal disturbance from unknown vocabulary.”

Vocabulary knowledge is undoubtedly a central part of linguistic knowledge, and its study is as old as the study of

language learning itself. The literature of second language learning/acquisition abounds in the study of vocabulary learning. Schmidt (1993), Knight (1994), Nation (1997, 2001), and Yoshii (2002) are among many researchers who consider learning vocabulary essential for English second language and English first language learners. Much of the recent research has been conducted to examine the importance of vocabulary in reading comprehension. The findings of many studies show a strong relationship between students' vocabulary knowledge and general reading skills (Salem, 2007). Psychologists, linguists, and language teachers have been interested in vocabulary learning strategies for a long time (Levenston, 1979). Actually, researchers began to effectively focus on vocabulary learning research in the mid 1980s and vocabulary learning is now a current focus in English second language pedagogy and research. Learning new vocabulary is, presumably, the most important element in second language learning, (Knight, 1994). Candlin (1988) describes the study of vocabulary -in its social context- by being "the heart of the learning process" (p. 260). Other researchers such as Harley (1996) accept the importance of vocabulary learning in language proficiency and academic achievement. However, their ideas about how vocabulary is learned vary widely. They argue that one of the major concerns in first language and second language vocabulary learning is the need to develop effective pedagogical

methods for teaching first language and second language vocabulary. Yet, here, it is important to mention what Nation (2001) states about the difference between two categories of vocabulary concerning the teachers' and learners' aims, and the efforts they exert: high-frequency words, and low-frequency words. High-frequency words do not require as much effort as low-frequency words. For the latter, he claims that "the teachers' aim is to train learners in the use of strategies to deal with such vocabulary. These strategies are guessing from context clues, deliberate studying words on word cards, using word parts, and dictionary use". (p. 20) A number of questionnaires, interviews and case studies (Gu & Johnson, 1996; Jones, 1995; Lawson & Hogden, 1996; Porte, 1988; Sanaoui, 1995) – as reported in Hulstijn (2001) – handled the concern of learners of a second language with the burden of vocabulary learning. They investigated two major hypotheses: students should learn words intentionally, even by memorizing, and students should learn or acquire new vocabulary by picking up words incidentally, as a by-product of being exposed to second language input in reading and listening tasks. According to the Acquisition-Learning Hypothesis (Krashen 1981), second language learners have two distinct ways of developing ability in second languages: learning and acquisition. Language acquisition is similar to the way children develop their first language. Learners can acquire second language without

meaning to. What they are aware of is using the language for some communicative purposes. What is more, they are often not aware of what they have acquired; they usually cannot describe or talk about the rules they have acquired. Language learning is different. It involves knowing about language or formal knowledge of a language. Language learning is thought to profit from explicit presentation of rules and from error correction. Error correction, supposedly, helps the learner come to the correct conscious mental representation of a rule. “Error correction has little or no effect on subconscious acquisition, but is thought to be useful for conscious learning”. (Krashen, 1982:14). Similarly, Saville- Troike (2012:2) argues that: Second Language Acquisition (SLA) refers both to the study of individuals and groups who are learning a language subsequent to learning their first one as young children, and to the process of learning that language.” “The scope of SLA includes informal second language learning that takes place in naturalistic contexts, formal second language learning that takes place in classrooms, and second language learning that involves a mixture of these settings and circumstances

1.1 Statement of the Study Problem:

Lack of second language sufficient vocabulary has been a common complaint or a problem among the English language learning in the first year at Sudan University of Science and Technology. There is always a big gap between their levels as

secondary school graduates, and the courses they are supposed to study at the university's prep year English program. A considerable percentage of university prep year students find difficulty in expressing themselves in English (second language) and consequently in coping with the activities in their daily classes. For students who just joined a new course, it is frustrating to open their English books and see a majority of unfamiliar words. Consequently, the university's Curriculum Unit has to look for courses of lower levels than the assumed ones, to be able to fill this gap. In addition, individual differences among those students are huge due to the big differences in quality and quantity among the courses they have already studied as they are coming from different schools and areas. For all these reasons, using glossing can be beneficial in two ways: solving this problem, and helping students learn and retain new vocabulary without wasting too much time in teaching new vocabulary or choosing English courses of lower levels.

1-2 Significance of the Study:

Much of the relevant research, over the past three decades or so, has been done on the effects of intentional vocabulary learning. Most of these studies attempt to question the following issues: intentional vocabulary needed to learn effectively the second or foreign language; The contradictory and inconsistent

results of many studies regarding the effects of intentional vocabulary learning and reading comprehension make it necessary to investigate the problem in different contexts (particularly a context like Sudan, where the issue is still largely under-researched, and where there is a growing need for English in the newly-established universities such as Khartoum College for Medical Science, where the researcher spent a number of years teaching scientific English to medical students) and from a variety of perspectives. In this context, the unprecedentedly growing need for English in higher education, is paralleled by worrying poverty of reading proficiency, specializing in the many colleges of science, engineering and medicine where English is the medium of instruction. Thus, the present study is expected to help promote understanding issues of English first language reading and vocabulary learning in the context of Sudanese universities.

1-2. Purpose of the Study:

The purpose of the present study is to explore the effectiveness of the strategies to be used in teaching intentional vocabulary and to what extent they would help enhance the learner's word power. There are many strategies advocated by linguists in this respect foremost of which is the use of glosses such as first language translation of target words and definition of the target words. Arabic can be used to make the different glosses as well as English.

1.4 Questions of the Study:

Q.1. To what extent learners are exposed to learning vocabulary through the medium of Arabic do better than their peers who were taught in English?

Q.2. To what extent is the use of the medium of instruction (Arabic –English) can affect the learning of intentional vocabulary?

1.5 Hypotheses of the Study:

H.1. Learners can easily acquire vocabulary intentionally when they interact with each other.

H.2. Incidental vocabulary learning is effectively done via an ample exposure to same word in various texts.

H.3. A minimum use of Arabic can help further improve students understanding of English texts.

1.6 Methodology of the Study:

The study adopts a descriptive methodology which represents in the questionnaire as a tool for data collection. The questionnaire consists of fifteen items derived from the three hypotheses of the study. Each five items or statements are derived from one hypothesis, then the questionnaire will be adjusted by specialized professional teachers. Then the questionnaire was distributed to learners of English Language at Sudan University who will express their opinions towards the items of the questionnaire. Then it will be analyzed statistically

using SPSS (The Statistical Package for Social Sciences) to detect the participants' opinions on the study.

1- 7 Limits of the Study:

This study takes place at Sudan University of Science and Technology, College of Graduate Studies, Department of English Language within the period of November 2015 to August 2017.

CHAPTER TWO
LITERATURE REVIEW AND
PREVIOUS STUDIES

CHAPTER TWO

LITERATURE REVIEW AND PREVIOUS STUDIES

2-0 Overview:

Psychologists, linguists, and language teachers have been interested in vocabulary learning strategies for a long time (Levenston, 1979). Numerous studies have been conducted comparing the retention effects of different vocabulary presentation strategies. In fact, the vocabulary field has been especially productive in the last two decades. We have seen a number of classic volumes on theories (e.g., Carter, 1987; Carter & McCarthy, 1988; McCarthy, 1990; Nation, 1990), research (e.g., Arnaud & Bejoint, 1992; Gass, 1987; Meara, 1989; Nation & Carter, 1989), and practical tips (e.g., Gairns & Redman, 1986; McCarthy & O'Dell, 1994). Recent volumes, especially the CUP volumes, that shed significant light upon different aspects of vocabulary acquisition include Huckin, Haynes, and Coady (1993), Harley (1995), Hatch and Brown (1995), Coady and Huckin (1997), Schmitt and McCarthy (1997), Atkins (1998), Wesche and Paribakht (1999), Read (2000), Schmitt (2000), and Nation (2001). This article aims to provide a digest of recent research on vocabulary acquisition and to pinpoint areas that need further exploration. To this end, the article focuses on one area, i.e., vocabulary learning strategies, the purposeful analysis of the vocabulary learning task, the planning, deployment, monitoring, and evaluation of learning

behaviors in order to acquire the vocabulary of a second language . It is argued that despite the impressive amount of recent research on vocabulary acquisition, a person-task-context-strategy perspective that is presented here is needed in order to anchor existing research in a larger framework and to point to areas for future efforts.

2-1. A person-task-context-strategy perspective:

When a person approaches a relatively challenging task, s/he adopts certain strategies to solve the problem. This problem-solving process is constrained by the learning context where the problem is being tackled. Language learning in general and vocabulary acquisition in particular are such problem-solving tasks at different levels of complexity. The strategies a learner uses and the effectiveness of these strategies very much depend on the learner him/herself (e.g., attitudes, motivation, prior knowledge), the learning task at hand (e.g., type, complexity, difficulty, and generality), and the learning environment (e.g., the learning culture, the richness of input and output opportunities).

Theorists and researchers have presented the same framework in slightly different ways. Williams and Burden's (1997) social constructivist model outlines four aspects of the teaching-learning process, i.e., teachers, learners, tasks, contexts. Cohen (2001) focuses on learners and discusses the

intersection of learning style preferences, learner strategies, and language tasks. Flavell's (1979) conception of the three components of metacognitive knowledge, i.e., person, task, and strategy, also applies in the language learning field (Wenden, 1987). Brown, Bransford, Ferrara, and Campione (1983) include learning activities, characteristics of the learner, criterial tasks, and nature of the materials as the four aspects of their framework for exploring problems of learning. The person-task-context-strategy model outlined here can be viewed as a synthesis of this body of knowledge, specifically for the purpose of analyzing research work on language learning strategies.

The learner brings to the language learning situation a wide spectrum of individual differences that will influence the learning rate and the ultimate learning result. The most widely reported learner factors include age, sex, language aptitude, intelligence, prior knowledge, motivation, self-concept/image, personality, and cognitive and learning style. These person-dependent factors are relatively stable, and determine to a large extent how a learner approaches a task.

2-1-1.The Learning Task:

A learning task is the end product in the learner's mind. It can be as broad as mastering a second language or as specific as remembering one meaning of a word. Broadly speaking, this conception of the learning task includes the materials being

learned (such as the genre of a piece of reading) as well as the goal the learner is trying to achieve by using these materials (such as remembering, comprehending, or using language). It should be noted that this conception of “task” is in line with the traditional, broader understanding of task as in Flavell (1979), Wenden (1987), and Williams and Burden (1997), and is different from the more recent and narrower definition of “task” in “task-based” approaches to language teaching and learning (e.g., Nunan, 1989).

Different types of task materials, task purposes, and tasks at various difficulty levels demand different learner strategies. For example, learning words in a word list is different from learning the same words in a passage. Remembering a word meaning is different from learning to use the same word in real life situations. Likewise, guessing from context would mean different things for texts of different levels of new word density.

2-1-2. Learning Context:

Learning context refers to the learning environment. It is the socio-culturo-political environment where learning takes place. The learning context can include the teachers, the peers, the classroom climate or ethos, the family support, the social, cultural tradition of learning, the curriculum, and the availability of input and output opportunities. Learning context is different

from language context which refers to the textual or discorsal place in which a particular word or structure can be found. Learning contexts constrain the ways learners approach learning tasks. A learning strategy that is valued in one learning context may well be deemed inappropriate in another context.

2-1-3. Learning Strategy:

A learning strategy is a series of actions a learner takes to facilitate the completion of a learning task. A strategy starts when the learner analyzes the task, the situation, and what is available in his/her own repertoire. The learner then goes on to select, deploy, monitor, and evaluate the effectiveness of this action, and decides if s/he needs to revise the plan and action. Cohen (1998) distinguishes between language learning strategies and language use strategies, the former being strategies for learning tasks such as remembering, and the latter being strategies for language use, such as communicating in an second language.

Person, task, context, and strategy are interrelated and work together to form the chemistry of learning. An analysis of learning strategies will never be complete without knowing the person-task-context configuration of the particular learning situation. Some strategies are more person-dependent, some are more task-dependent, and others are more context-dependent.

2-2. Incidental and Intentional Learning in Second Language Vocabulary Literature:

Hulstijn (2003) points out that learning a second language can either mean months and years of —intentional study, by deliberately committing to memory thousands of words along with grammatical words, or it can mean —incidental learning by —picking up structures and lexicon of a language, through getting engaged in a variety of communicative activities, namely reading and listening, while the learner's attention is focused not on the form but on the meaning. Incidental and intentional learning mainly appear in the area of vocabulary. This is because incidental learning can be applied to both abstract and factual declarative knowledge, while intentional is only applicable to factual knowledge (Hulstijn, 2003). Hunt and Beglar (1998) point out that many vocabularies are learned incidentally through extensive reading and listening. Accordingly, motivating learners to read and listen extensively can provide them with great opportunities to learn new vocabularies. In terms of Huckin and Coady (1999), too, except for the first few thousand most common words, vocabulary learning predominantly occurs through extensive reading with the learner guessing the meaning of unknown words. This process is incidental learning of vocabulary for the acquisition of new words and is the byproduct of the reading (i.e., not the main focus of the cognitive activity, reading). However, this

process of incidental learning of vocabularies occurs gradually as Anderson (1985; cited in Richards and Renandya, 2002) claims. The incidental vocabulary learning, as Hunt and Beglar (1998) point out, can be a useful approach for all language learners at all levels. Shmidth (1990; cited in Nyiazadeh, 2009), also points out that incidental learning is definitely passive in that it can happen when the focus of attention is on some relevant features of input. However, he believes that since incidental learning is useful in task-based language, pedagogy is still a fruitful area of investigation. He further notes that there is an argument that maintains what is learned—whether incidentally or intentionally—is what is noticed (Ericson & Simon, 1985; cited in Shmidth, 1996). So far, many studies have been carried out in the field concerning vocabulary learning/teaching approaches. For instance, Huckin and Coady (1999) investigated the role of incidental and intentional vocabulary acquisition. They conclude that incidental vocabulary learning is not entirely incidental in that learners pay at least some attention to individual words. The other studies are reviewed below. Huckin and Coady (1999) mention the following advantages of incidental vocabulary learning:

- A. It is contextualized, giving the learner a rich sense of word use and meaning.
- B. It is pedagogically efficient in that it yields two activities at the same time: vocabulary acquisition and reading.

C. It is more learner-based, in that it is the learner who selects the reading materials.

It is worthy of notice that in a review of 114 studies, Krashen (1989) argued that incidental vocabulary acquisition occurs through operation of his input hypothesis: that reading provides comprehensible and necessary input that eventually leads to acquisition. In addition, Krashen (1989, cited in Hulstijn 2003), points out that acquisition of vocabulary and spelling is achieved through exposure to comprehensible input, in this case, reading. Wode (1999) in a study of incidental vocabulary acquisition in a foreign language classroom, found that it is important to investigate in detail which properties of IM teaching -late partial English immersion (IM) programs- are best suited to trigger the incidental learning with respect to vocabulary (and other linguistic elements). Ellis and He (1999) investigated the roles of modified input and output in the incidental acquisition of word meaning. Their study proved that interactional output which provides opportunities for learners to use new vocabularies contributes to better incidental vocabulary acquisition. Paribakht and Wesche (1999) also conducted research investigating the relationship between reading and incidental second language vocabulary acquisition. Their study demonstrated incidental acquisition of new lexical knowledge through reading of thematically related texts; hence, vocabulary knowledge may be acquired as a by-product of reading

comprehension. In addition, their study showed that among learners' strategies, inferencing, was the main vocabulary strategy use employed. Among the other factors, frequency of exposure to new vocabularies is another determining factor in learning vocabulary. Rott (1999) studied the effect of frequency with which words occur in a reading text and the role of reading as an input resource in vocabulary acquisition. Her study examined whether intermediate learners incidentally acquire and retain unknown vocabulary by reading a text. The result of the study indicated that, regarding retention measures on productive vocabulary knowledge, only half of the subjects displayed a significant rate of retention, and on receptive knowledge, all but one experimental group retained vocabularies over four weeks. Hulstijn (2006) makes a distinction between intentional and incidental learning as —Intentional learning refers to the learning mode in which participants are informed, prior to their engagement in a learning task, that they will be tested afterward on their retention of a particular type of information. Incidental learning refers to the mode in which participants are not forewarned of an upcoming retention test for a particular type of information.‖ Incidental learning has been defined differently by scholars in the field. For instance, Schmidt (1994a; cited in Hulstijn, 2003) three definitions are presented as follows

- (i) ... learning without the intention to learn.

(ii)...the learning of one stimulus aspect while paying attention to another stimulus aspect ... incidental learning is learning of one thing (...) when the learner's primary objective is to do something else.

(iii)...the learning of formal features through a focus of attention on semantic features. Moreover, Hulstijn (1996; cited in Gass, 1999) asserts that the definition of incidental learning is: —learning in the absence of an intention to learn. In spite of the fact that incidental and intentional learning might seem similar to implicit and explicit learning, respectively, these two dichotomies are not identical. As Paradis (1994a; cited in Hulstijn 2003) points out, since implicit competence is incidentally acquired, is stored implicitly and is used automatically, it means more than incidental learning. Therefore, while incidental learning of vocabulary may be a useful way of acquiring vocabularies for most advanced learners, intentional/explicit instruction is essential for beginning learners whose reading ability is limited (Hunt and Beglar, 1998) Ellis (1994b, cited in Gass 1999) also points out that incidental learning differs from implicit learning in that incidental learning is based on a behaviorist notion —with the meaning of a new word being acquired totally unconsciously as a result of abstraction from repeated exposures in a range of activated contexts (p.219). Ellis (2008) defines explicit and implicit knowledge in this way: —Implicit knowledge is

intuitive, procedural, systematically variable, automatic, and thus available for use in fluent unplanned language use. It is not verbalizable. ... Explicit knowledge is conscious, declarative, anomalous, and inconsistent (i.e., it takes a form of 'fuzzy' rules inconsistently applied) and generally accessible through control processing in planned language use. It is verbalizable ... like any type of factual knowledge it is potentially learnable at any age.

On the other hand, explicit learning involves awareness at the time of learning, whereas intentional learning occurs by deliberately attempting to commit new information to memory. Accordingly, with the Second Language vocabulary learning, incidental and intentional learning are regarded as two distinct categories, because while intentional learning implies the use of deliberate retention techniques, incidental learning does not (Hulstijn, 2003). Therefore, while incidental vocabulary learning of vocabulary may be a useful way of acquiring vocabularies for most advanced learners, intentional/explicit instruction is essential for beginning learners ,since their reading ability is limited (Hunt and Beglar, 1998). Suchert (2004; cited in Ellis 2008) defined attention as —a process in which biological mechanisms interact when goal-directed behaviors and stimulus-driven responses converge in action (p.144)".As for experimental operationalization of incidental and intentional

learning, as mentioned in Hulstijn's study, two experimental methods are employed usually. The first one is type 1 design, or between group one, which was employed in earlier studies aimed at demonstrating that while incidental learning exists, intentional learning is superior to incidental learning. On the other hand, in within-group type 2 design is within group, which has been used in later studies, is the one employed in the present study. In this design type 2 some additional stimuli in addition to some main stimuli are presented to learners. Retention of these additional stimuli are also tested unexpectedly afterwards, while the students expect to be tested on main materials. Methodologically, if learners are told in advance of the treatment that they will be tested on the material this is intentional learning, whereas if they are not told, those materials would be considered to be learned incidentally (Hulstijn, 2003). This methodology was followed by the present study, so that the participants were told that they will be tested only on their knowledge of bold type -intentional- vocabularies. To their surprise, they were also tested on their knowledge of not bold type-incidental- vocabularies appearing in the reading texts.

2-3 Language Learning Strategy:

Ever since 1975, when Rubin brought out the concept of language learning strategies for the first time, many, many studies have been carried out to investigate the role of this

construct and its influence on learning an Second Language in general, and vocabulary acquisition, in particular. As Wended (1985; cited in Griffiths, 2006) says, an old proverb states: " 'Give a man a fish and he eats for a day. Teach him how to fish and he eats for a lifetime.' " According to the meaning implied by this proverb, the teachers should provide the students with some fruitful techniques that may help them learn better without the direct help of teachers (hence, making them autonomous). Tajeddin (2006), in a similar vein, points out that there has been a shift from the methods of teaching to the learner's characteristics, and accordingly, their influence on process and product of language learning. He further notes that a discrepancy exists pertaining to the effect of frequency of strategy use and its effect on the achievement of language proficiency. Lawson and Hoghen (1996) similarly, note that theorists nowadays put an emphasis on the importance of developing autonomous learning strategies by foreign language learners. Moreover, books demand that teachers provide their students with language learning strategies and encourage them to use them (McCarthy, 1990; Nation; 1990; Oxford; 1990; cited in Lawson and Hoghen, 1996).

The importance of language learning strategies are once more highlighted by Grainger (2005) who mentions that, among many factors, that second language research has been identified

to have an impact on proficiency of language learners' language learning strategies. He goes further and defines language learning strategies as techniques that are consciously used by a learner to assist him or her purposely in the language learning process. These techniques in terms of Grainger (2005) can fall into subgroups which are known as —factors or groupings which indicate special kinds of strategies such as cognitive, metacognitive, social, affective or compensatory. He concludes that language learning strategy use in learning a second language is related to proficiency or achievement (p.2). The current study too, attempts to investigate the link between vocabulary use and vocabulary acquisition. In addition, Griffiths (2006), points out that the pioneering work in the field of language learning strategies was carried out by Rubin (1975) and Stern (1975) during the mid-'70s. Nevertheless, after a quarter of a century, the language learning strategy field is characterized by "no consensus" (O'Malley et al, 1985a: 22; cited in Griffiths, 2006) and the concept of language learning strategies still remains "fuzzy" (Ellis, 1994: 539; cited in Griffiths, 2006). However, = "fuzzy" it might appear, there are some operational definitions of this construct. For instance, Oxford (1990) points out that learning strategies are those steps taken by learners in order to enhance their own learning and that these are especially important for learning a language. This is because they are essential for developing communicative

competence. She also notes that by using language learning strategies an improved proficiency and greater self-confidence is achieved. She suggests that the steps taken by students to enhance their own learning are called strategy. Strategies are considered to be tools for gaining autonomous involvement, an essential factor for development of communicative competence. Many other researchers (Donato and MacCormick, 1994; Ellis, 1994; McDounough, 1999; Wenden, 1998; cited in Gao, 2006) declare that learning strategy research is mostly concerned with listing and classifying language learning strategy use. This can help make association between strategy use and various factors to develop strategy use of language learners. In addition, he points out that other research indicates that the use of strategy is a dynamic phenomenon and varies across contexts, and therefore, is contextual and temporary. In other words, strategy use is dependent on and related to the specific tasks and particular situations, so not all of them can be used in all situations. That is why they are temporary and context-bound. Most of the studies are mainly concerned with theoretical considerations of language learning strategies (Griffiths, 2008). Rubin (1975; cited in Oxford, 2002) for instance, asserts that good language learners: —a- willingly and accurately guess, b- want to communicate, c- are inhibited about mistakes, d- focus on both structure and meaning, e- take advantage of all practice opportunities, and f- monitor their own speech and that of

others. In a similar vein, (Naiman, Frohlich, & Todesco, 1975; cited in Oxford, 2002) add that successful language learners pay attention to effective aspects of language learning and think in language. It should also be noted that no language learner uses just one strategy for vocabulary acquisition (Farhady, 2006). There are some operational definitions of this construct however "fuzzy" they might appear. For instance, Oxford (1990) points out that learning strategies are those steps taken by learners in order to enhance their own learning and that these are especially important for learning a language. This is because they are essential for developing communicative competence. She also notes that by using language learning strategies an improved proficiency and greater self-confidence is achieved. She suggests that the steps taken by students to enhance their own learning are

Called Strategy. Strategies are considered to be tools for gaining autonomous involvement, an essential factor for development of communicative competence. According to O'Malley and Chamot (1990, p: 2; cited in Farhady2006), learning strategies are —special ways of processing information that enhance comprehension, learning or retention of information. Oxford (1990) points out that learning strategies are those steps taken by learners in order to enhance their own learning. These are especially important for learning a language

in that they are essential for developing communicative competence. She also notes that by using language learning strategies, an improved proficiency and greater self-confidence is achieved. O'Malley et al. (1985a, cited in Griffiths, 2006), use the "operations or steps used by a learner that will facilitate the acquisition, storage, retrieval or use of information" (p. 23) as the definition of the language learning strategies. And, Rubin (1975, p. 43; cited in Griffiths, 2008) declares —strategies are the technique or devices which a learner may use to acquire knowledge. Oxford (1990; cited in Griffiths, 2003) defines strategies as —learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, more transferable to new situations (p. 8). However, Griffiths defines language learning strategies in this way: —specific actions consciously employed by the learner for the purpose of learning language. Researching language learning strategies in the field, finally, has come to this definition of this construct: that —... strategies that contribute to the development of the language system which the learner constructs and (which) affect learning directly (Rubin, 1987, p. 23; cited in Leavell and Nam, 2006). However, there are some conditions under which the use of language learning strategies are useful: —a- the strategy relates well to the Second Language task at hand, b- the strategy fixes the particular students' learning style preferences to one degree or another,

and c- the student employs strategy effectively and links it with other relevant strategies (Ehrman, & Leaver, and Oxford, 2003). Recent research, as Leavell and Nam point out, has aimed at determining a connection between strategy use and language proficiency (Green and Oxford, 1995; Oxford and Ehrman, 1995). The result of such research indicates that more proficient language learners employ more strategies compared with less proficient learners (p.2). He further notes that research has shown that there exists a difference between male and females regarding their use of strategies, so that females use more strategies than males (Ehrman and Oxford, 1989; Green and Oxford, 1995; Oxford, 1993; cited in Leavell and Nam, 2006). The relationship between the language learning strategy use, namely, vocabulary learning strategy use, and vocabulary acquisition is one of the main concerns of the present study, as aforementioned.

2- 4. Vocabulary Learning Strategy:

In recent years, the importance of vocabulary acquisition has been emphasized by researchers and commentators, in that vocabulary acquisition plays a crucial role in learning a second language (Allen, 1983; Laufer, 1986; Nation, 1990; Richards, 1980; cited in Lawson and Hoghen, 1996). However, there is a lack of consensus regarding the conceptualization of the process concerning what contributes to vocabulary acquisition. For

example, —the importance of the context use for acquiring vocabulary, and the extent to which students do develop specific strategies for vocabulary learning during their language studies (Lawson and Hoghen, 1996). They point out that another determining factor concerning vocabulary acquisition is the importance of context and the value of reading (Moulton, 1966, Twaddle, 1980, Parreren; cited in Mondria & Wit-De-Doer, 1991). Different scholars identify vocabulary learning strategies differently, some of which are: 1) memorization strategies, 2) repetition strategies, 3) association strategies, 4) key word method, 5) inferencing strategy, 6) dictionary use (Cohen and Macaro, 2007), 7) semantic grid strategies, 8) word lists (Farhady, 2006). According to Farhady (2006), applying certain types of strategies forms an approach to vocabulary learning that influences the level of foreign language proficiency. In other words, appropriate strategy use results in improved achievement in specific skills or sub-skills. Moreover, language proficiency also affects the use of particular vocabulary strategy use.

2-5. The task of vocabulary learning:

One way to see the overall task of vocabulary learning is through the distinction between knowing a word and using a word. In other words, the purpose of vocabulary learning should include both remembering words and the ability to use them automatically in a wide range of language contexts when the

need arises (McCarthy, 1984). In fact, evidence suggests that the knowledge aspect (both breadth and depth) requires more conscious and explicit learning mechanisms whereas the skill aspect involves mostly implicit learning and memory (Ellis, 1994). Vocabulary learning strategies, therefore, should include strategies for “using” as well as “knowing” a word.

Another way to view vocabulary learning is to see it as a process of related sub-tasks. When learners first encounter a new word, they might guess its meaning and usage from available clues. Some learners might proceed to look it up in the dictionary. Others might take down notes along the margins, between the lines, or on separate vocabulary notebooks. Some learners will repeat the new word a number of times until they are comfortable with it. Others will go beyond simple rote repetition to commit the word to memory. Some would even try to use the word actively. Each of these task stages demands metacognitive judgment, choice, and deployment of cognitive strategies for vocabulary learning. And each strategy a learner uses will determine to a large extent how and how well a new word is learned.

2-6. Task-dependent Vocabulary Learning Strategies:

To date, most of the empirical research on vocabulary learning strategies in a second language have focused on different sub-tasks of vocabulary learning. Fewer studies can be found on person-related vocabulary learning strategies. Likewise, learning context has been merely noted in passing in discussions.

2-7. Guessing and Vocabulary Learning:

The premise under this line of research is the belief that the vast majority of words in first language come from extensive and multiple exposures through use rather than direct instruction, and therefore, vocabulary learning in a second language should follow the same route (Coady, 1993). A number of questions have often been asked in the literature: Does guessing lead to incidental vocabulary learning in a second language? How many exposures are needed to learn a word incidentally? Is incidental vocabulary learning better than intentional learning? And, is guessing enough for vocabulary development in a second language? Each of these questions is dealt with below.

2 -7 -1 Does guessing lead to vocabulary learning?:

Ample evidence suggests that children learn a large proportion of their first language vocabulary incidentally from reading and listening (Nagy, Anderson, & Herman, 1987; Nagy

& Herman, 1987; Nagy, Herman, & Anderson, 1985). Nagy, Anderson, and Herman (1987, p. 262) estimated an average vocabulary growth of 1,000 words a year for the children in their study. A well-quoted study of adults by Saragi, Nation, and Meister (1978) showed an average of 76% mastery of the 90 tested “nadsat” words of Russian origin.

Fewer studies have been carried out in second or foreign language contexts. What we have does suggest a similar pattern. Pitt, White and Krashen (1989) replicated the Saragi *et al.* (1978) study by asking their adult ESL learners to read the first two chapters of *A Clockwork Orange*. The subjects were asked to read the novel for meaning only, and were given a multiple choice test of 30 nadsat words afterwards. An average of 2 words (7%) gain was observed.

A similar study was done by Ferris (1988) (cited in Krashen, 1989, p. 446), in which 30 adult ESL students read George Orwell’s novel *Animal Farm*. A multiple-choice test of 75 words was given to these subjects before and after they read the novel and to a control group of 21 international students who did not read the novel. The experimental group who read the novel made significantly better gains than the control group.

A study of English first language students was conducted by Day, Omura, and Hiramatsu (1991). They divided 181 high school and 397 university EFL students in Japan into an experimental group and a control group respectively, and asked the experimental groups to read silently a short story in class for roughly 30 minutes. A multiple-choice vocabulary test of 17 items was administered immediately following the reading. Both the high school and the university experimental groups significantly outperformed their control group counterparts. Day *et al.* (p. 545) concluded that “exposure to previously unknown or difficult words through sustained silent reading for entertainment by Japanese English first language students has a positive effect on their ability to recognize these words in a vocabulary test”.

To sum up, first language and English second language studies have provided evidence showing the possibility of incidental vocabulary learning through repeated exposure. However, English first language and English second language studies tended to produce results that reveal significantly lower gains in incidental vocabulary learning than first language studies. And most English first language and English second language studies have been conducted on intermediate to advanced learners of English. Moreover, some English first language and English second language studies suggest that

learners are often unable to guess the meaning of an unknown word from a text (Bensoussan & Laufer, 1984; Haynes, 1993; Kelly, 1990; Schatz & Baldwin, 1986). This suggests that 1) Second Language learners in general, due to their inadequate grasp of target language skills, are less effective guessers and less effective incidental learners of English vocabulary; and if this is true for intermediate to advanced learners, 2) beginning Second Language learners who do not have the basic language skills in the target language to make sense of new words and their contexts would have much more trouble learning vocabulary incidentally.

2-7-2. How many exposures are needed to learn a word?:

Very different research results have been obtained in this regard. Nation (1990) concluded that 5-16 exposures are needed in order to learn a word from context. Meara (1997) suggested a 0.01 hypothesis (1 uptake every 100 exposures) for Second Language learners, arguing that these learners are normally unable to be exposed to large quantities of text. A more recent study (Horst, Cobb, & Meara, 1998), which featured low intermediate English first language learners reading a 109-page book over a ten-day period, obtained a 20% pick-up rate. They also observed that words which appeared over eight times in text were more likely to be learned than words that were repeated less. Results so far seem to vary considerably. However,

researchers do seem to have come to the conclusion that the number of exposures needed for the mastery of a new word hinges on many other factors such as the salience of the word in context (Brown, 1993), the richness of contextual clues, the learner's interest and the size and quality of his/her existing repertoire of vocabulary (Laufer & Hadar, 1997; Nation & Hwang, 1995).

2-8. Incidental vs. intentional vocabulary learning:

In a comprehensive review of research on incidental vocabulary learning in mostly first language contexts, Krashen (1989) concluded that incidental vocabulary learning, or “acquisition”, achieves better results than intentional vocabulary learning. A major flaw in this review lies in the assumption that “spelling and vocabulary are developed in second languages as they are in the first language” (p. 454). A prerequisite for effective incidental vocabulary learning through reading is, as mentioned earlier, reading ability, an ability beginning foreign language learners possess only to a very limited extent. This problem would be exacerbated when the second language being learned is of a totally different orthography, e.g., Chinese English first language students learning English, where differences in writing system pose serious challenges to the development of reading ability and therefore to vocabulary learning through reading (Haynes, 1990). Moreover, where

learners have little target language input and insufficient reading materials at their disposal, an exclusive incidental vocabulary learning program will stifle the language development of these learners.

In fact there is already evidence in recent studies of second language learners that a combined approach is superior to incidental vocabulary learning alone. Zimmerman (1994), for example, found that 3 hours a week of explicit vocabulary instruction plus some self-selected reading were more effective than reading alone. Paribakht and Wesche (1997) also found that reading plus explicit instruction led to superior gains over a period of three months.

In a series of longitudinal case studies, Parry (1991, 1993, 1997) went a step further and demonstrated how exactly a combination of incidental and intentional learning of vocabulary during reading 1) could be possible, and 2) helped the overall development of both Second Language vocabulary and academic success in Second Language. Parry (1997), for example, studied the vocabulary learning strategies of two ESL learners at Hunter College of the City University of New York in reading their anthropology textbook. Both learners, Dimitri and Ae Young, guessed, looked up new words, and made

glosses, and both, therefore, went through intentional as well as incidental learning.

It should be noted that the very term “incidental learning” is open to different interpretations in the literature. In fact, the last few years have seen the blurring of distinction between the incidental and intentional dichotomy. Traditional studies of incidental vocabulary learning involve learners being told just to read for comprehension, recent twists to the incidental vocabulary learning concept have included more demanding tasks beyond reading such as looking up new words in dictionaries for comprehension (Laufer & Hill, 2000) and recalling and retelling what is read (Joe, 1998). Results tend to suggest that the more demanding a task is, the more vocabulary items will be learned through reading. In this regard, Laufer and Hulstijn’s (2001) review serves not just to underscore the important concept of “task-induced involvement” but also to direct another fruitful line of research.

Thus far, research seems to indicate that incidental vocabulary learning through reading and listening is not only possible but also plausible strategies for vocabulary development. However, this strategy seems to be more effective for native speakers and intermediate to advanced Second Language learners who already have at least a basic grasp of the

language skills such as reading and listening. Even for these learners, the usefulness of incidental learning does not exclude the use of intentional learning strategies. Huckin and Coady (1999, pp.189-190) warned us that “guessing from context has serious limitations. It is still seen as an important part of vocabulary-building, especially among advanced learners, but it requires a great deal of prior training in basic vocabulary, word recognition, metacognition, and subject matter”. Lastly, the most recent tendency to see incidental learning as involving different levels of task involvement (Laufer & Hulstijn, 2001) also suggests a need to combine incidental and intentional learning as a vocabulary learning strategy. Similar views are shared by Nation (2001) and Schmitt (2000), two new books on vocabulary acquisition. After all, as Ellis (1994) rightly points out, different aspects of vocabulary demand different acquisition mechanisms, and hence, I would add, different strategies of learning.

2-9. Dictionary Use and Vocabulary Learning:

The debate of whether dictionaries should be used in the foreign language classroom, and what dictionaries, if at all, should be used has always been a lively one amongst language teachers and lexicographers. Empirical research on dictionaries has largely focused on comparing the usefulness of dictionaries with that of guessing (Knight, 1994). And only a handful of

these studies took vocabulary growth as their dependent variable (Knight, 1994; Luppescu & Day, 1993), most others investigated the usefulness of dictionaries in reading comprehension. Dictionary strategies, if at all encouraged, have normally been proposed in a prescriptive manner (Scholfield, 1982; Thompson, 1987).

2-9-1. How useful are dictionaries?

Like it or not, a dictionary is amongst the first things a foreign language student purchases (Baxter, 1980; Luppescu & Day, 1993), and learners carry their dictionaries around, not grammar books (Krashen, 1989). Empirical research on whether dictionaries are helpful and how best dictionaries can be used, however, is only beginning to catch up. Amongst all the questions that can be asked of dictionaries, one has received the most attention: Which is better, using a dictionary or simply guessing from context? Or to put it another way: Do dictionaries make a difference?

2-9-2. Dictionaries and vocabulary learning:

Most studies on the effectiveness of dictionaries in vocabulary learning have been conducted in first language settings, and most have compared dictionary definitions with contextual guessing. In general, results in these studies favored the contextual guessing approach (Crist, 1981; Crist & Petrone,

1977; Gipe, 1978). These results were, however, confounded by the fact that the contextual guessing groups read texts that included definitions or examples, and were therefore exposed to dictionary-like situations as well as natural texts (Knight, 1994). Stahl and Fairbanks' (1986) meta-analysis of first language - based vocabulary studies did reveal that a combined approach is more effective than either dictionary only or contextual guessing only. [-6-]

Recent years have witnessed a surge of interest in dictionary research in second language contexts (e.g., Hulstijn, 1993; Knight, 1994; Laufer & Hadar, 1997; Laufer & Hill, 2000; Laufer & Kimmel, 1997). Knight (1994), for example, discovered that while incidental vocabulary learning through contextual guessing did take place, those who used a dictionary as well as guessed through context not only learned more words immediately after reading but also remembered more after two weeks. She also found that low verbal ability participants benefited more from the dictionary than high verbal ability participants who, in turn, benefited more from contextual guessing. Another interesting thing Knight found was that high verbal ability students would look up a word even if they had successfully guessed its meaning, a finding in line with Hulstijn (1993).

The advantage of a dictionary was corroborated in a study of 293 Japanese EFL university students by Luppescu and Day (1993). Participants were randomly assigned to a treatment (dictionary) group (N=145) and a control (no dictionary) group (N=148) and were asked to read a short story in class. The treatment group used a bilingual English-Japanese dictionary of their own choice, and the control group were not allowed to use any dictionaries. Neither group were told of the multiple-choice vocabulary test that was administered immediately after reading. Results suggested a clear advantage for the dictionary group in vocabulary learning through reading, but the dictionary group took almost twice as long to read the passage as did the control group.

Further evidence of the usefulness of a dictionary for English second language / English first language students can be found in Summers (1988) who reported the results of three experiments done on the effectiveness of the Longman Dictionary of Contemporary English both in reading comprehension and in vocabulary learning. The first two experiments focused on reading comprehension and found that comprehension was significantly improved by the use of the dictionary. The third experiment asked participants to produce nine of the tested words in sentences. Results suggested that the

mix of definition plus example in the dictionary entry was the most successful, and that the use of the dictionary in all conditions tested was more conducive to the successful production of new words in sentences.

2-9-3. What dictionaries: Bilingual or monolingual?:

Until recently, the default stance taken by most experts and teachers is that a monolingual, rather than a bilingual dictionary should be encouraged (Hartmann, 1991). In fact, most of the published work on this topic is of the argumentative type.

Baxter (1980) described one common problem amongst English first language students: not being able to access a word in speech and lacking the ability to circumvent that word by providing a definition in the target language. He attributed this problem primarily to students' use of bilingual dictionaries and strongly advocated the use of monolingual dictionaries that would encourage "conversational definition" (p. 335). In general, Baxter reiterated the basic concerns of most language teachers, that bilingual dictionaries 1) encourage translation; 2) foster one-to-one precise correspondence at word level between two languages; and 3) fail to describe adequately the syntactic behaviour of words.

By contrast, Thompson (1987) argued against monolingual dictionaries and supported the development of "a new

generation of learners' bilingual dictionaries" (p. 286). He pointed out that monolingual dictionaries tend to be circular in their definitions, e.g., laugh, amuse, amusement and humour are normally used in each other's definitions. Even if defining vocabulary is restricted, monolingual dictionaries still "employ a special register which is not necessarily the most useful or rewarding for learners to be exposed to" (p. 284), and are therefore of little value to foreign language learners below the advanced level. Thompson did admit that objections to traditional bilingual dictionaries are valid, and he advocated the compilation of new bilingual dictionaries that, in addition to providing clearer understanding in the learners' first language, "avoid reinforcing the belief in a one-to-one relationship at word level" (p. 285), and provide full semantic, grammatical, and stylistic information, examples, and usage notes that are not available in traditional bilingual dictionaries.

Since a combination of good features of both types of dictionaries is not impossible, there has been considerable interest in the last twenty years in the "new bilingualised compromise dictionaries", hybrid dictionaries that essentially provide translations in addition to the good features of monolingual dictionaries (Hartmann, 1991, p. 79). Evaluation of the effectiveness of such dictionaries emerged mainly in the 1990s. Laufer and Hadar (1997), for example, compared

monolingual, bilingual, and bilingualised dictionaries among 123 English first language learners in Israel. They found that irrespective of the learners' proficiency level, the bilingualised version was either significantly better than, or as good as, the other two types in both comprehension and production tasks.

2-9-4 . E-dictionaries:

Recent developments in computers have triggered a whole line of interest in electronic dictionaries, online dictionaries or vocabulary glosses integrated into language learning software or web pages (e.g., Hulstijn, 1993; Knight, 1994; Koren, 1999; Laufer & Hill, 2000; Lomicka, 1998; Roby, 1999). In general, the same questions that have been asked of traditional dictionaries are being asked of their e-versions. Not surprisingly, very similar answers are obtained, for example, electronic dictionaries that contain not much more than first language equivalents are not quite helpful to the language learner (Koren, 1997). Two new developments warrant special mentioning: 1) computers offer researchers a powerful and convenient tool in terms of logs or trackers of learner behavior in dictionary use; and 2) online vocabulary glosses offer the learner a quick access to the information s/he needs which in turn might encourage more dictionary use. However, clicking on a hyperlink is a look-up strategy totally different from flipping through a bulky dictionary, locating the relevant entry, and finding the

contextually meaningful information. While the ease and speed might encourage more dictionary use and reading, the convenience might not always be a good thing for vocabulary learning. By the same token, the online logs we obtain about learners' dictionary behaviors might not contain exactly the same behaviors the same learners would demonstrate when they use paper dictionaries. Clearly we need to see more work along this exciting line of research before we can arrive at any comfortable conclusions about online dictionaries and glosses.

“Perhaps we have become more skeptical about a single most appropriate dictionary format, perhaps we are more wary about dogmatic statements on which dictionary is good for you, and realize that more research is needed on what real dictionary users do in real situations of dictionary look-up” (Hartmann, 1991, p. 79). Indeed, the field is beginning to take up this challenge. In addition to the experimental comparison of different types of dictionaries, more studies are emerging that aim to discover what exactly learners do and how their dictionary strategies influence their learning results.

2-9-5. Dictionary strategies:

Learners' dictionaries are certainly compiled with the language learner in mind. And almost every such dictionary is accompanied by at least one workbook (most notably Underhill,

1980; Whitcut, 1979) aiming for the training of dictionary strategies to maximize the effect of dictionary use in language learning. With only a handful of exceptions, little has been done empirically to find out what dictionary strategies are used by learners and whether and how these strategies influence their learning outcomes. [-8-]

In an analysis of the steps learners need to look up a word for comprehension, Scholfield (1982) suggested seven steps for the language learner, and analysed each step in great detail (pp. 186-193). He argued that making use of a dictionary should not be seen as a straightforward technical and passive activity, it is rather a complex process of hypothesis testing that involves the active participation of the learner. Similar views and strategies are also presented in Nation (2001, pp.285-287). What Scholfield and Nation described is a synthesized and idealized dictionary strategy a learner should use when looking up a word during reading. We do not know, however, whether Second Language dictionary users do make use of these steps. Nor do we know if using these steps would help the learner in his/her vocabulary learning through reading.

Another important aspect that needs more attention is how learners should make full use of the dictionary as a tool for active production of the target language. As Summers (1988)

noted, “the student and non-native teacher have a powerful tool at their disposal . . . with which to gain further understanding of the range of use of new language, leading eventually to accurate production, mainly in writing” (p. 123). If learner autonomy is to be the aim, learners have to be able to make use of this useful tool when the teacher is not available. In this regard, one recent and timely addition is a study of 211 English second language learners by Harvey and Yuill (1997), which mapped out 1) the reasons for dictionary use for a writing task, 2) how exactly learners used the dictionary, and 3) how successful they were in achieving their purposes.

Two studies not often referred to in the literature also tried to focus on the processes of dictionary use by ESL students. Ard (1982) studied how ESL students in a high-intermediate level writing class used bilingual dictionaries. Retrospective accounts of how these learners used their dictionaries in and out of class were obtained, together with a sample of protocol data of two students writing a composition in class. Ard found that some of the students’ writing errors were induced by the use of the bilingual dictionary and that this was related to the differences between first language and Second Language.

Neubach and Cohen (1988) studied how six English first language students (2 high, 2 intermediate, and 2 low-level) at

the Hebrew University of Jerusalem used the dictionary while reading. Verbal report protocols and interview data were obtained from these students. They listed a number of interesting strategies these students used, and concluded that generally “advanced students do not need the dictionary so much, while weak ones cannot use it to their advantage” (p. 14). Specifically, high-proficiency students went into their dictionaries with correct expectations at both the sentence and the word levels, while the intermediate learners did not always determine the part of speech of the word being looked up, had frequently wrong expectations of the word as well as problems with other words in the definition when a monolingual dictionary was used. And the low proficiency students were frustrated for not being able to get the right definition from the dictionary and refrained from using it.

More studies are needed to determine how English second language and English first language students use dictionaries and how their dictionary strategies influence their learning results. Indeed, it is alarming to see how much time and effort we have spent in areas such as contextual guessing or mnemonics and yet how little energy is dedicated to an area such as dictionary strategies that can be just as illuminating.

2-10. Note-taking and Vocabulary Learning:

After getting information about a new word, learners may take notes, in the form of vocabulary notebooks, vocabulary cards, or simply notes along the margins or between the lines. However, learners differ in what they do in note-taking, when they take notes, and how they take notes (McCarthy, 1990). These differences, among other things, may well distinguish the good from the poor learners. Teachers instinctively know how important note-taking is, and a lot has been said on how note-taking should take place (Allen, 1983; Gairns & Redman, 1986; Schmitt & Schmitt, 1995), very few studies have touched upon vocabulary note-taking and how it affects vocabulary learning.

[-9-]

In a study not specifically designed for the study of note-taking strategies, Ahmed (1989) collected think-aloud, observation, and interview data from 300 Sudanese English first language learners. Apart from finding that “note-taking” was a strategy these Sudanese learners used very commonly, and that this “macro-strategy” did not distinguish the good from the poor learners, little was reported as to how the “micro-strategies” of note-taking did affect the learning result of these learners. This was partly due to the fact that 1) Ahmed’s study examined the overall pattern of vocabulary learning strategies rather than note-taking, and 2) Ahmed was interested mostly in a

quantitative clustering of binary percentage ratio data that ruled out a detailed description of how exactly note-taking took place and how it affected the learning result. Another study that looked at note-taking is Cohen and Apehek (1979) who focused on Hebrew learners in a summer program in Israel. Some learners would leave their notes in the order in which they appeared. Others would copy over their notes after class, putting words into groups. However, this study did not relate these note-taking strategies to learning result. Research is sorely needed to determine how different types of note-taking strategies can influence vocabulary acquisition.

2-11. Rote Rehearsal and Vocabulary Learning:

One of the first problems a foreign language learner encounters is how to commit a massive amount of foreign words to memory. And the first and easiest strategy people pick up and use naturally is, simply, repeating new words until they can be recognized. It is therefore not surprising to see most of the earlier research focusing on various aspects of vocabulary rehearsal.

This section on vocabulary rehearsal strategies is deliberately short, not because rehearsal is unimportant, or empirical studies are specifically limited in number, but because 1) most studies done on various aspects of vocabulary rehearsal

were carried out before the 1970s; 2) later studies have focused on some “deeper” strategies (see the subsequent section on encoding strategies); 3) empirical research in this aspect has produced relatively conclusive results, and 4) a review of these studies can be found in Nation (1982). Four of the most interesting issues on word list learning will be introduced: 1) the number of repetitions needed to remember a word list; 2) the optimum number of words to be studied at one time; 3) the timing for repetition; and 4) repeating aloud vs. repeating silently.

2-11-1. Number of repetitions needed to remember a word list:

Encouraging findings on this issue can be found in the literature. Crothers and Suppes (1967) discovered that almost all of their participants remembered all 108 Russian-English word pairs after 7 repetitions, and about 80% of 216 word pairs were learned by most participants after 6 repetitions. Similarly, Lado, Baldwin and Lobo (1967) presented their intermediate level college students of Spanish with a list of 100 words, and found that only one exposure sufficed for an average of 95% recognition and 65% recall. In general, results on this issue show that, if remembering word pairs is the aim, a surprising amount can be learned within a relatively short time (Thorndike, 1908; Webb, 1962), and not many repetitions are needed before

the second language- first language word pairs can be remembered.

2-11-2. The optimum number of words to be studied at one time:

How many words should a list contain? Investigators have tried various list sizes and concluded generally that this issue depends on the difficulty level of the words on the list. Crothers and Suppes (1967), for example, examined list sizes ranging from 18 to 300 and discovered that when words were difficult, small list sizes were better, and that when words were easy, large sizes were more efficient. It was thus suggested that if a word list does not contain a lot of difficult words, lists of 100 or more words can be studied at one time.

2-11-3. The Timing For Repetition:

Not surprisingly, a considerable amount of earlier work on foreign language vocabulary learning followed the psychological paradigm in memory research. And almost all studies focusing on the pacing of repetition and recall of word lists arrived at the same conclusion: that forgetting mostly occurs immediately after initial encounter, and that the rate of forgetting slows down afterwards. Anderson and Jordan (1928) examined the number of words that could be recalled immediately after initial learning, 1 week, 3 weeks, and 8 weeks thereafter and discovered a learning rate of 66%, 48%, 39%, and

37% respectively. Similar results can be found in Seibert (1927, 1930). It was therefore suggested that students should start repeating newly learned words immediately after the first encounter. Spaced recall and repetition should follow afterwards at longer intervals.

2-11-4. Repeating aloud vs. Repeating silently:

Empirical results on this issue are also relatively unanimous, that repeating words aloud helps retention far better than silent repetition. Seibert (1927), for example, studied three conditions: studying aloud, studying aloud with written recall, and studying silently, and found that the first condition always produced better results than the other two. He then studied the time for relearning after 2, 10, and 42 days, and found again that learning aloud was much more efficient than the other two conditions. More recent studies [2] (Gary & Gary, 1982; Gershman, 1970; Hill, 1994; Kelly, 1992) produced similar findings indicating, to use Kelly's words (p. 142), that "the ear does assist the eye in the long-term retention of lexis".

Empirical research on vocabulary rehearsal has produced relatively convincing results that serve to underscore one important message: it is necessary and legitimate to employ various repetition strategies at the initial stages of vocabulary learning. As Carter (1987, p. 153) puts it: "quantities of initial

vocabulary can be learned both efficiently and quickly and by methods such as rote learning which are not always considered to be respectable. It may be dangerous to underestimate such a capacity.”

It is worth noting that recent literature shows that individual differences play an important part in determining a person’s memorization capacities (Miyake & Shah, 1999). This will mean, among other things, that vocabulary retention is very much a function of an individual’s skillfulness in memory strategies. It also means that the ability to memorize and the preference for memorization are dependant upon the cultural background of the learner. With this in mind, let us turn to deeper strategies for vocabulary learning.

2-12. Encoding and Vocabulary Learning:

Since the 1970s, attention to vocabulary acquisition strategies has shifted from various aspects of word list repetition to deeper processing strategies. The following section will focus on four of these areas: memory, form, meaning, and use.

2-12-1. Mnemonics: Focusing on memory:

This is an area that has received by far the most attention, so much so that I would even argue that it has turned into a classic case of overkill. Mnemonics as aids to memory has

fascinated philosophers, psychologists, teachers, and learners ever since antiquity (Wittrock, 1988). Mnemonic devices in foreign language vocabulary learning in modern times were boosted by a whole robust line of research inspired by Atkinson (1972, 1975) and Atkinson and Raugh (1975). The presupposition underlying this research tradition is very simple: 1) mnemonic devices work miraculously in boosting memory; 2) vocabulary learning is essentially a memory issue; and therefore 3) mnemonics should work for foreign language vocabulary learning as well.

One of the most studied mnemonics is *the keyword method*, in which the foreign word is remembered by being linked to a keyword, a sound-alike native word (the acoustic link), through an interactive image that involves both the foreign word and the native word (the imagery link) (Atkinson, 1975). A verbal version of the keyword method differs from the imagery version only at the last stage, where, instead of an interactive image, a sentence is made up in the learner's first language that involves the keyword and the first language equivalent "doing something together". It is hoped that the stimulus of the foreign word would trigger the activation of the sound-alike keyword, which would in turn activate the interactive image or sentence, resulting in the retrieval of the real meaning.

Comprehensive reviews exist on the effectiveness of mnemonic techniques in foreign language vocabulary learning (e.g., Cohen, 1987; Hulstijn, 1997; Meara, 1980; Nation, 1982; Paivio & Desrochers, 1981; Pressley, Levin, & Miller, 1982). The majority of empirical studies involve one type of mnemonic devices, most probably the keyword method, and the typical task involved in these experiments would be the recall of a list of word-associates between second language target words and their first language equivalents within a period of 2 to 4 weeks. With the exception of a handful of studies in classroom contexts (Fuentes, 1976; Levin, 1979; Willerman & Melvin, 1979), two and a half decades of rigorous experimentation points to a single conclusion that the keyword method is superior to almost all other methods tested (e.g., rote repetition, semantic methods, or placing words in a sentence). These findings are so unanimous that another review here would appear redundant. Instead, I would like to point out that this is not entirely an empirical issue. Despite the obvious robustness of experimental results, mnemonic approaches to vocabulary development in an second language suffer from the following limitations:

- Mnemonic devices mainly aim for the retention of paired-*associates*. However, the vocabulary of an second language is far more than a collection of first language - second language word pairs (Richards, 1976), and the

retention of a word is the beginning rather than the end of the long process of vocabulary acquisition (Meara, 1996).

- The mnemonic approach to vocabulary development emphasises on a fixed one-to-one relationship between form and meaning. However, a key notion in the applied linguist's conception of vocabulary is multiple meanings and multiple dimensions of meanings (referential, syntactic, pragmatic, emotional, etc.).
- Mnemonic techniques tend to focus on the referential meaning of a word, often at the expense of its grammatical information. As a result, mnemonic devices may not necessarily be cost-effective in the long run if word use in natural contexts rather than meaning retention is the final aim (Paivio & Desrochers, 1981).
- Not all words are equally suitable for mnemonic mediation (e.g., abstract words, Ellis, 1997). A few mnemonics that arise naturally during the learning process are certainly beneficial; too much emphasis on this method would be tantamount to overkill.
- Mnemonic devices are “much less effective in productive vocabulary learning than in learning to comprehend the Second Language because imagery association in the keyword technique allows retrieval of a keyword which is merely an approximation to the Second Language form”. More importantly, these techniques do not include in-built

tricks to help spelling and pronunciation (Ellis, 1997, p.137).

- Delayed recall after 2 weeks under experimental conditions is normally referred to as “long term retention”, while the same period of time is but an instant in the natural vocabulary development process. Moreover, the complete entailments of a word may never be developed in the long run if the learner does not actively seek to expose him or herself to authentic speech and texts.
- Mnemonic devices might be more applicable at different stages of learning. They might benefit absolute beginners who need to remember a large number of fairly arbitrary paired-associates or advanced learners whose target language system has already been established.
- Learners of a foreign language should be explicitly warned that mnemonic devices are only meant to complement rather than replace other approaches to vocabulary learning (Cohen, 1987). As Carter (1987, p. 188) rightly contends, too great a focus on learning vocabulary as discrete items [3] may well lead to neglect of the skill aspect of vocabulary in natural discourse.

2-12-2. Word-formation: Focusing on form:

Most initial work in this area came from lexicographers. Understandably, their “pedagogical implications” were

prescriptive in nature, and focused mainly on why etymological information is important to the learner and what should be taken into consideration. For example, Kelly (1991, pp. 80-81) maintained that knowledge of Graeco-Latin roots can assist in vocabulary development in that it helps students predict or guess what a word means, explain why a word is spelt the way it is, and remember the word by knowing how its current meaning evolved from its metaphorical origins. Ilson (1983, pp. 77-80) identified 4 types of etymological information that can help the learner: 1) etyma and cognates; 2) morphological analyses of lexical units in terms of their constituent structure; 3) morphological analyses of lexical units in terms of processes of word formation; and 4) analyses of lexical units in terms of the cognitive procedures (e.g., metaphor) of their formation and development. Nation (1990, pp. 168-174) focused on the skill aspect and outlined three skills a learner needs in order to make use of affixation: breaking a new word into parts so that the affixes and roots are revealed; knowing the meanings of the parts; and being able to connect the meaning of the parts with the meaning of the word. He went on to provide examples of how each skill can be developed.

Research on vocabulary errors and the mental lexicon of English first language learners, though not directly related to the process of vocabulary acquisition, does provide considerable

insight into how the formal aspect of words is learned. Meara (1980, 1984) suggested that the formal properties of words might be more salient than their semantic properties at the beginning stages of learning. Laufer's (1988, 1990, 1991) explication of "synforms" (similar lexical forms) and intralexical factors (Laufer, 1997) has also indicated that the learner's mental lexicon is unstable and that the formal aspect creates a major source of confusion in vocabulary learning (see also Gu & Leung, 2002, for examples). Future research can address whether the apparent dominance of formal errors among beginning to intermediate learners of EFL is related to their intentional choice of vocabulary learning strategies.

2-12-3. Semantic networks: Focusing on meaning:

Recent developments in lexical semantics tell us a lot about vocabulary learning. Componential analysis and the paradigmatic versus syntagmatic conceptions of the mental lexicon, for example, have prompted the development of the semantic field, semantic network or map, or semantic grid strategies in which new words are presented and organised in terms of maps or grids of interrelated lexical meanings (Channell, 1981, 1988; Crow, 1986; Crow & Quigley, 1985; Stieglitz, 1983). These semantically based strategies, though intuitively appealing, tend to be, once again, prescriptive in

nature, though, this time, the prescription came from linguists, not psychologists.

Not many studies have looked at whether and how learners use semantically based strategies and how their use of these strategies affects both their learning of vocabulary and the target language in general. While some empirical evidence did suggest their effectiveness (e.g., Crow & Quigley, 1985), other researchers warned us against the danger of presenting closely related new words at the same time (Higa, 1963; Nation, 1994; Tinkham, 1993; Waring, 1997). Specifically, Nation (1990, p.191) maintained that when a group of related items require the same response from the learner, such as the tasks involved in Crow and Quigley (1985), learning would be helped. On the other hand, if a different response is required for each item in a group of closely related items, the differences between the items will interfere with each other, thus making the learning task more difficult. “The network of associations between words in a native speaker’s brain may be set as a goal for second language learners, but this does not mean that directly teaching these associations is the best way to achieve this goal” (Nation, 1990, p.190). How much these associations in first language and Second Language correspond to each other, and how they can be employed to develop the Second Language lexicon, need much more empirical exploration. [-14-]

2-12-4. Vocabulary in use: Focusing on language context:

The previous sections focused on various strategies of vocabulary encoding that tend to treat vocabulary as a collection of discrete items. While these strategies constitute a considerable part of the vocabulary learning process, a vocabulary development agenda that includes mainly these strategies might well lead to a dangerously simplistic conception of vocabulary amongst undiscerning beginners. It is thus not hard to understand why some learners produce sentences such as: “Mrs. Morrow *stimulated* (stir up) the soup” or “Me and my parents *correlate* (be related with each other), because without them I wouldn’t be here” (Miller & Gildea, 1987).

Theorists and researchers of different traditions have long been fascinated by lexical phrases, lexicalised chunks, (Lewis, 1993; Nattinger & DeCarrico, 1992; Willis, 1990), multiword units, and collocations (Arnaud & Savignon, 1997; Bahns & Eldaw, 1993; Cowie, 1988; Sansome, 2000). The availability of computer-generated corpora has made it simpler to find not only patterns of multiword units from authentic contexts, but also their respective frequency of use. Pedagogical suggestions are either in favor of an inductive (e.g., Lewis, 1997; McKay, 1980) or an explicit and deductive type (Sansome, 2000). So far as learning strategies are concerned, Arnaud and Savignon (1997,

p.168) note two kinds of strategies associated with complex lexical units: awareness strategies and retention strategies.

It was concluded earlier that incidental learning alone is not enough in developing a functional vocabulary in a second or foreign language. Similarly, the intentional and direct learning of vocabulary does not, and should not, rule out contextual learning. In fact, learning new words from context might well be only the first step learners employ, and they should carry on, with metacognitive choice of words and treatment, to encode the new word together with the context where it appears (e.g., remembering the word together with the surrounding sentence). Some may even try to create a sentence using the new word and thus put it back into context (Sanaoui, 1995). Most empirical studies on contextual learning have compared incidental vocabulary learning from context with other forms of vocabulary presentation. Future research can examine how the other forms of contextual encoding (i.e., remembering new words with context, and using a new word in context) relate to other strategies and to learning results.

2-13. Person-dependent Vocabulary Learning Strategies:

From guessing at the first encounter, to possible dictionary use and note taking, to rehearsal, encoding, and contextual activation, vocabulary learning in real life situations is a

dynamic process involving metacognitive choices and cognitive implementation of a whole spectrum of strategies. Whether and how a learner evaluates the task requirement and whether and how a cognitive strategy is deployed are often dependent more on the learner than on the task. This learner-oriented process view of vocabulary acquisition that looks at naturally occurring vocabulary learning strategies as they relate to individual differences as well as the vocabulary learning task is beginning to form a new trend.

2-14. Good learners, poor learners, and their vocabulary strategies:

The Ahmed (1989) study referred to earlier was amongst the first to elicit vocabulary strategies learners spontaneously employ. The good learners were found to be more aware of what they could learn about new words, paid more attention to collocation and spelling, and were more conscious of contextual learning. By contrast, the underachieving learners refused to use the dictionary and almost always ignored unknown words. They were generally characterized by their apparent passiveness in learning. They also took each word as a discrete item unrelated to previously learned words.

Another study that explored students' ability level and their guessing strategies is Schouten-van Parreren (1989). It was

found that, compared to their strong counterparts, weak pupils tended to focus on the problem word and ignore the context; their knowledge of the world was more restricted; they had difficulty integrating knowledge from different sources; they lacked mother tongue vocabulary knowledge, and they had difficulty generalizing from words they had already learned to slightly different new words.

Gu and Johnson (1996) studied 850 university English first language students in China, and tried to establish how different vocabulary strategies were related to language learning outcomes. Both Pearson's correlation and multiple regression analyses revealed that self-initiation, selective attention, and deliberate activation of newly learned words consistently predicted both vocabulary size and general proficiency. Other predictors of success included contextual learning, dictionary, and note-taking strategies. Interestingly, a more recent study (Kojic-Sabo & Lightbown, 1999) of 47 ESL and 43 EFL students produced strikingly similar results, suggesting that "time and learner independence were the two measures most closely related to success in vocabulary learning and higher overall English proficiency" (p.176).

2-15. Individual Differences and Vocabulary Learning Strategies:

The very notion of strategies being learner-initiated actions connotes the inherent relationship between strategies and individual difference factors such as motivation, self-efficacy, gender, learning background, and learning styles. However, only a handful of studies can be found along this line of research.

An number of case studies demonstrate the style differences in vocabulary learning. In Parry (1997), Dimitri employed a “holistic” approach, paying attention to overall understanding, while Ae Young used an “analytic” approach, spending considerably more time on guessing, analyzing, and intentional learning of each new word. Parry concluded that flexibility in strategy use is needed because “both approaches are necessary but . . . neither is appropriate at all times” (p. 18). Similarly, Gu (2003)’s “freehand” learner employed more “holistic” strategies, while the “fine brush” learner demonstrated more of an analytical approach in learning EFL vocabulary in China. In three small-scale exploratory studies involving ESL or FSL (French as a second language) students in Canada, Sanaoui (1995) asked her participants to keep a written record of what they did each day for a period of six, four, and three weeks respectively. Two approaches to vocabulary learning were identified: The first group approached vocabulary learning in a structured way, setting criteria for the selection of words,

engaging in self-initiated learning activities, keeping a systematic note of vocabulary items being learned, and regularly reviewing their records. The other group, by contrast, did little independent learning, kept minimal records of new words being learned, and relied heavily on classroom instruction. Moreover, they did not know what words to focus on, often depending on what the teacher wrote on the board. Sanaoui suggested that the two approaches to vocabulary learning should be two ends of a continuum, and that most learners might fall somewhere in between the two ends. Sanaoui also noted in brief another study in which she found that “learners who had a structured learning approach were more successful in retaining vocabulary taught in their classes than learners who had an unstructured learning approach”, and that “a structured approach was found to be more effective than an unstructured approach for both beginning and advanced learners” (p. 26).

Sex differences in vocabulary learning have also received some attention. Boyle (1987) found that, despite a female superiority in general proficiency, male students outperformed their female counterparts in listening vocabulary. Oxford, Lavine, Hollaway, Felkins, and Saleh (1996), on the other hand, discovered that females were significantly more willing than males to try out new vocabulary learning strategies, a finding

that has been corroborated in a few other studies (Gu, 2002; Young & Oxford, 1997). [-16-]

Despite an obvious lack of effort on learner-dependent vocabulary learning strategies, patterns are already emerging. Good learners seem to be those who initiate their own learning, selectively attend to words of their own choice, studiously try to remember these words, and seek opportunities to use them.

2-16. Learning Context and Vocabulary Learning Strategies:

Compared to task- and person-dependent strategies, learning context has received only cursory attention. Most studies would either ignore the educational and cultural traditions, the availability of input and output opportunities, and the classroom environment, or try to confine the contextual dimension by focusing on one homogeneous group of learners. Many studies, however, do discuss their results by singling out the context factor. Oxford's (1996) volume, though not specifically on vocabulary learning, underscores the importance strategy researchers are beginning to place on learning context. Throughout this review, I have repeatedly highlighted learning context when the focus is on task or person. This shows the interrelatedness of the person-task-context-strategy model.

Future research should focus on different aspects of learning context as they relate to learners, tasks, and vocabulary learning strategies. Personal styles of learning, for example, have been shown to be very much related to cultural differences (Nelson, 1995). In addition, classroom learning environments should demand different vocabulary learning strategies from informal learning contexts. Likewise, the availability and richness of input/output opportunities should also determine the strategies learners decide to use.

2- 17. The Distinction Between Intentional and Incidental Learning:

Ellis (1999) describes the distinction between incidental and intentional learning as follows:

The distinction between incidental and intentional learning is based on the distinction between focal and peripheral attention. Intentional learning requires focal attention to be placed deliberately on the linguistic code (i.e., on form or form-meaning connections), while incidental learning requires focal attention to be placed on meaning (i.e., message content) but allows peripheral attention to be directed at form (pp. 45-46).

Therefore, any learning, whether intentional or incidental, can only take place with some degree of attention (Schmidt, 1994). By the same token, Hulstijn (2003) claims that intentional or incidental learning requires some attention and noticing. Attention is deliberately directed at committing new information

to memory in the case of the former whereas the involvement of attention is not deliberately geared to an articulated learning goal in the case of the latter. Most scholars agree that except for the first few thousand most common words, second language vocabulary is predominantly acquired incidentally (Huckin & Coady 1999; Robinson, 2005; Nakata, 2008). Gass (1999) suggests that words are more likely to be learned incidentally if:

- (a) there are recognized cognates between the native and the target languages,;
- (b) there is significant second language exposure, or
- (c) other second language related words are known.

A general problem with the operational definition of incidental vocabulary acquisition is that it seems to suggest that incidental learning occur unconsciously. Gass (1999) explicates that defining incidental vocabulary acquisition as the ‘side-effect’ of another activity neglects the active role of the learner in this process. Following Gass (1999), Rieder (2003) postulates the fact that incidental learning occurring as a by-product of reading does not involve any conscious processes (Rieder, 2003). Alternatively, Ellis (1994) criticizes the seeming equation of ‘incidental’ with ‘unconscious’. He further states that incidental vocabulary acquisition is non-explicit in so far as it does not involve an explicit learning intention (the overall goal of the learner is text comprehension), but that neither the process

nor the product of such learning is necessarily implicit in the sense of non-conscious.

Moreover, Rieder (2003) relates the terms implicit and incidental by viewing incidental vocabulary acquisition as being composed of implicit learning processes (which happen without the learner's awareness) and/or of explicit learning processes (which take place without learning intention but nevertheless involve online awareness and hypothesis formation). Ellis (1997) stipulates that both implicit and explicit learning mechanisms are involved in incidental vocabulary acquisition while the acquisition of a word's form, collocations and grammatical class information are said to involve implicit processes, acquiring a word's semantic properties and mapping word form to meaning are alleged to result from explicit learning processes and there is a complete dissociation of implicit (i.e. formal) aspects and explicit (i.e. semantic) aspects of vocabulary acquisition. Some researchers contend with Ellis' postulations and provide comments and reactions to his claims rather than presenting original viewpoints of their own. Singleton (1999: 153), for instance, criticizes Ellis' notion of dissociated processes, stating that even if learning forms and meanings of unknown words are initiated by different mechanisms, this does not necessarily imply that they are

managed separately at all stages. Instead, Singleton would argue for a possible interaction between implicit and explicit systems. There are potential benefits to word study programs that provide students with knowledge about word structure and strategies to infer the meanings of words. One reason is that not all students come to this understanding with ease. Students with language learning and reading disabilities are likely to be delayed, relative to their peers, in vocabulary development, including morphological knowledge and awareness (Fowler & Liberman, 1995; Windsor, 2000). Furthermore, students who are English language learners (ELLs) face particular challenges learning English vocabulary and benefit from instruction in word-learning strategies including morphological analysis (White, 2006). Leaving morphological analysis to be discovered by students on their own means that those who are in some way challenged by language learning are likely to be left behind their peers in the development of vocabulary, word reading, and reading comprehension. Word study programs that focus on morphology tend to do so for the primary purpose of either improving word reading and spelling or improving vocabulary. Most programs also include some amount of reading of natural texts. However, what is missing is assistance for students in learning how to use decoding and meaning-making strategies while reading. Unfortunately, poor readers are unlikely to use decoding strategies and comprehension strategies without

considerable scaffolding to learn to apply these strategies during reading (Baker & Brown, 1984). They also need sufficient guided practice so that they see the value of the new strategies and use them relatively automatically as they encounter glitches in their understanding of texts they read on their own (Westby, 2004). In principle, struggling readers seem to need help to improve the inferential processes that will jointly support their learning of vocabulary during reading and their comprehension of texts.

Research, teacher surveys and reading methodology textbooks consistently attest to the value of instruction related to deriving word meaning from written context. It is widely acknowledged that native speakers of a language are able to derive the meaning of unknown words from context, and this ability accounts for a large part of a native speaker's vocabulary size (Walters, 2004). Second language learners are also apparently able to infer from context while reading (Horst, Cobb and Meara, 1998). Students in the middle grades encounter between 16,000 and 24,000 new words in the approximately million words of text they read annually (Nagy, Herman & Anderson, 1985). Graves (1986) estimated that students acquire on average between 1,000 and 5,000 words from context through the course of a school year. His findings also indicated that the vocabularies of students of high and low verbal ability

grow at different rates, with the result that differences in vocabulary growth increase over the years. Thus, students could benefit greatly by an efficient strategy for determining word meaning from unfamiliar words. It is still a controversial issue in language classrooms to see whether words can be inferred from contexts without being taught and instructed. For instance, Walters (2004) asserted that researchers, attempting to discover whether the ability to infer from context can be trained, tend to use one of the three methods of training: 1) teaching the use of an overall strategy to be used when encountering unknown words in text 2) instruction in recognizing and interpreting specific context clues found in text 3) developing awareness of context through practice with cloze exercises.

The first category investigates the effects of teaching a general strategy for coping with unknown word while reading. Camine, Kame'enui and Coyle (1984) propose three conditions: rule presentation plus systematic practice applying the rule, systematic practice only, and no intervention. In the rule presentation condition, subjects were given the rule 'When there's a hard word in a sentence, you look for other words in the story that tell more about the word.' (p. 197). Subjects were asked to apply this rule to the target word in the passage, and then choose one of four alternative meanings for the word. In the systematic practice only condition, subjects were asked only

to choose one of four alternative meanings for the target word, without being told the rule. They were, however, told they could look back at the passage if they wished. The no-intervention group did not receive any training. Both the rule plus- practice and the practice-only groups performed better on the post-tests than the no-intervention the rule-plus-practice group and the practice-only group, suggesting that explicit statement of the rule did not contribute to these subjects' performance. The authors speculate that www.sciedu.ca/wjel World Journal of English Language Vol . 1, No. 1; April 2011 Published by Sciedu Press 71. This was the result of telling the practice-only group that they could refer back to the passage, thus inadvertently advising them to use context.

In a similar line of inquiry, Jenkins, Matlock and Slocum (1989) observed the effects of instruction in a general strategy. Their strategy involved substituting a word or expression for the unknown word, checking for context clues that confirm the substitution, asking if the substitution is supported by all context clues, considering the need for a new idea, and revising the original guess to fit the context. In second language setting, Kern (1989) integrated reading strategy instruction into the normal curriculum of a semester-long university-level French class, focusing on word analysis, sentence analysis, and discourse analysis, which included explicit instruction in

inferring meaning from context using a general strategy. Friedland (1992) compared traditional context instruction with a direct, process-oriented type of instruction, designed to increase subjects' ability to determine word meaning from context. It consisted of explicit instruction of the process of using context, modeled by the teacher, followed by guided practice, followed by practice and application. In the traditional context instruction condition, subjects practiced deriving word meanings from context independently, and then reviewed their responses through class discussion. Significant differences in ability to derive word meanings from context were found between groups that varied by the amount of practice, but no significant quantitative difference was seen between the two instructional groups. However, qualitative differences in interview responses were seen, revealing positive effects for the direct process oriented approach.

Van Daalen-Kapteijns et al. (2001) classified three activities for deriving word meanings from context as follows:

- 1) Text oriented: when the learner is concerned with the meaning of the word in order to keep the flow of understanding going.
- 2) Word oriented: when the learner is concerned with the use of contextual clues, morphological analysis of words, and rehearsal.

3) Vocabulary knowledge oriented: when the learner is mainly concerned with using the unknown word as an opportunity to improve his or her vocabulary knowledge and deals with the new word in order to derive knowledge, which can be integrated into semantic memory.

However, due to lack of enough research on the impact of instruction in deriving word meaning, the present study sought to firstly investigate the effect of instruction in deriving word meaning on the ability of recognizing unknown words in the context capitalizing in the light of the model proposed by Van Daalen-Kapteijns et al. (2001), secondly it aimed to find out that contextualized words appearing with more clues are learned better and consequently kept longer, and finally to uncover whether this instruction would lead to increasing incidental vocabulary learning in the text.

2-18. Summary and Conclusion:

Thanks to the pioneers in rote rehearsal, incidental vocabulary learning and mnemonic strategies, the field has come to many valuable conclusions. However, in order to avoid asking repeatedly very similar research questions on various approaches to vocabulary presentation and retention, this following section will attempt to turn our attention to avenues for further research.

1. Vocabulary acquisition research in the linguistics tradition has largely concentrated on vocabulary (target: what is to be learned; or product: what is learned) rather than acquisition (how is vocabulary learned, the learning/acquisition process) (Crow, 1986; Meara, 1980).
2. In the psychology tradition on vocabulary learning, memory strategies have occupied the lion's share of attention at the expense of other vocabulary learning strategies, probably because vocabulary learning has largely been construed as a memory problem.
3. List learning and short-term recall tasks have been the norm in the literature on intentional vocabulary learning. Applied linguists today well know that the learning of single words is different from the learning of multiword units, not to mention the entire functioning lexicon in a second/foreign language.
4. Much of the emphasis on incidental vocabulary learning has centered on how useful incidental learning is and how much can be learned incidentally, often overlooking the fact that a lot can be learned intentionally during reading with the help of a range of strategies (e.g., guessing, dictionary use, note-taking, activation, as well as intentional repetition).
5. The majority of empirical research has centered on the initial learning (mostly basic recognition) rather than long-

term development of vocabulary. Real-life learning of the vocabulary of a foreign language, however, is far from this simple. As Nation (1982) and Meara (1996) rightly observe, vocabulary learning is an on-going process. Being able to remember one meaning of a list of words within a week or two is easy, developing a functional lexicon that contains morphological, semantic, syntactic, pragmatic, and emotional connections needs a gradual process that takes much more time and effort.

6. Contrary to the language learning strategy tradition, vocabulary acquisition research has thus far adopted a primarily top-down approach. Most studies are experimental comparisons between some favored strategies and various combinations of control techniques. And most involve artificial memory and recall tasks without asking if these tasks are ecologically valid and how big a role these tasks play in authentic second/foreign language classrooms. If helping the learner in the classroom rather than testing a hypothesis in the lab is to be the final aim, more ecologically valid designs should be in order in the field of vocabulary acquisition.
7. Strategies good for meaning retention may not be good for overall proficiency. This is because, among other reasons, proficiency in a second/foreign language involves the automatic activation of individual words and the automatic

contextual processing of these words during comprehension and production. As Ellis (1994) rightly stresses, when we consider the semantic aspect of vocabulary acquisition, the depth of processing principle will stand out. On the other hand, if the learning task centres on the acquisition of automaticity of vocabulary use, strategies that focus on the frequency, recency, and regularity of practice will be most helpful. In this connection, more studies such as Segalowitz, Watson, and Segalowitz (1995) that take into account the attainment of lexical automaticity should produce valuable insights.

8. Existing research on vocabulary learning strategies does point to a direction that good learners pay more attention to collocations (e.g., Ahmed, 1989), but the field would definitely benefit from a clearer focus on how exactly learners learn multiword units and how these strategies are related to learning outcomes (Schmitt, 2000).
9. Research efforts have largely been directed towards discovering *the* “best” strategy for vocabulary retention. In reality, however, learners tend to utilize a variety of strategies in combination. Recent research (e.g., Ahmed, 1989; Gu & Johnson, 1996; Parry, 1997; Sanaoui, 1995) indicates that these approaches to, or styles of vocabulary acquisition, which may relate more to the learner than to

the task, may be more potent predictors of success than individual vocabulary learning strategies.

10. Conceptions of learning have been found to differ from culture to culture (e.g., Watkins & Biggs, 1996). Even the same strategy may be executed in different ways in different educational traditions. More research clearly needs to be done along the learning context dimension.

In conclusion, a lot of work has been done along a more nomothetic line, in terms of finding overall patterns of strategy use. However, the choice, use, and effectiveness of vocabulary learning strategies very much depend on the task (e.g., breadth vs. depth), the learner (e.g., cognitive and cultural styles of learning, motivation), and the context (e.g., first language, second language, or FL contexts). Future research, therefore, needs a more idiographic touch that takes all the previous aspects into account. Enough attention on what vocabulary is (the task of vocabulary acquisition) would prevent us from focusing exclusively on word list retention strategies. We can then look at, for example, strategies for multiword units, strategies for vocabulary as skill, strategies for students at different levels of proficiency, and strategies for different stages in the acquisition of a given word. Likewise, the context perspective is much needed if we are to stop the quixotic search of the strategy grail. Strategies that work in one educational, cultural, and linguistic context might not work in another.

The field needs a diversification of labor. While theory building is certainly in order so that future empirical research receives clearer guidance (Laufer & Hulstijn, 2001; Meara, 1998), more bottom-up empirical effort on different aspects of vocabulary learning at different stages of acquisition for different learners in various cultural and educational contexts will help us answer so many other research questions beyond the presentation and retention of words. After all, a full-fledged, interrelated, functional, and dynamic second language vocabulary is *developed*, gradually, and grows by itself, if the learner makes use of strategies that aim for the use, rather than retention, of words. Therefore, what we need is a developmental model which moves us beyond strategies for the initial handling of vocabulary and gives more emphasis to the really hard work of vocabulary acquisition.

Conclusion of the Chapter:

In recent years, the importance of vocabulary acquisition has been emphasized by researchers and commentators, in that vocabulary acquisition plays a crucial role in learning a second language. This chapter includes literature review and previous studies related to the current study. It also includes intentional and incidental strategies for learning vocabulary. The strategies a learner uses and the effectiveness of these strategies very much depend on the learner him/herself (e.g., attitudes, motivation, prior knowledge), the learning task at hand (e.g., type, complexity, difficulty, and generality), and the learning environment (e.g., the learning culture, the richness of input and output opportunities). Intentional learning, by deliberately committing to memory thousands of words along with grammatical words, or it can mean —incidental learning by —picking up structures and lexicon of a language, through getting engaged in a variety of communicative activities, namely reading and listening, while the learner's attention is focused not on the form but on the meaning. Incidental and intentional learning mainly appear in the area of vocabulary. This is because incidental learning can be applied to both abstract and factual declarative knowledge, while intentional is only applicable to factual knowledge (Hulstijn, 2003). Hunt and Beglar (1998) point out that many vocabularies are learned incidentally through extensive reading and listening.

Accordingly, motivating learners to read and listen extensively can provide them with great opportunities to learn new vocabularies. In terms of Huckin and Coady (1999), too, except for the first few thousand most common words, vocabulary learning predominantly occurs through extensive reading with the learner guessing the meaning of unknown words. This process is incidental learning of vocabulary for the acquisition of new words and is the byproduct of the reading (i.e., not the main focus of the cognitive activity, reading). However, this process of incidental learning of vocabularies occurs gradually as Anderson (1985; cited in Richards and Renandya, 2002) claims. The incidental vocabulary learning, as Hunt and Beglar (1998) point out, can be a useful approach for all language learners at all levels. Shmidth (1990; cited in Nyiazadeh, 2009), also points out that incidental learning is definitely passive in that it can happen when the focus of attention is on some relevant features of input. However, he believes that since incidental learning is useful in task-based language, pedagogy is still a fruitful area of investigation. He further notes that there is an argument that maintains what is learned—whether incidentally or intentionally—is what is noticed (Erricson& Simon, 1985; cited in Shmidth, 1996). So far, many studies have been carried out in the field concerning vocabulary learning/teaching approaches. For instance, Huckin and Coady (1999) investigated the role of incidental and intentional

vocabulary acquisition. They conclude that incidental vocabulary learning is not entirely incidental in that learners pay at least some attention to individual words. It is contextualized, giving the learner a rich sense of word use and meaning. Intentional strategies of vocabulary learning include note-taking, the use of dictionaries both monolingual and bilingual dictionaries as well as strategies of using dictionaries. In addition to, rote rehearsal. Incidental strategies include guessing and exposing learners to a variety of contexts. Incidental learning is learning without an intention to learn.

CHAPTER THREE
METHODOLOGY OF THE
STUDY

CHAPTER THREE

METHODOLOGY OF THE STUDY

3-0 Overview:

This chapter contains a descriptive methodology which is used in the study. The researcher generally used the descriptive and analytical method. The research is mainly designed to obtain pertinent and precise information concerning the current status of the phenomenon and draw conclusions from what is observed. The data collected therefore, represent the participants' opinions (students of English language at Sudan University of Science and Technology) and their attitudes and impressions towards the study. The tool used for data collection comprises of a questionnaire which was distributed to undergraduate students of English language as well as the researchers' own observations and for data processing, statistical analysis is conducted via the application of SPSS.

3-1 Population of the Study:

The word population refers to a collection of specified group of human beings. Thus, the target group of this study consists learner of English language at Sudan University of Science and Technology, who are specializing in English and who are aware of and have relevant information of the study.

3-2 Sample of the Study:

The method used is a non-probability sampling method because samples were selected at the discretion of the researcher. However, the selection is arbitrary, there is good evidence that the sample are representative of the total population.

Therefore, samples of the study were randomly chosen out of the target population, because each member of the population has the same opportunity of being selected as study sample . The number of learners of English language who were selected as a sample for the study were thirty students including both gender types male and female students.

3 -3: The Tool of the Study:

The tool of the study represented in the questionnaire which include fifteen items derived from the three hypotheses of the study. Each five items or statements are derived from one hypothesis, then the questionnaire was adjusted by specialized professional figures such as Dr. Abbas Mukhtar – at Sudan University, College of Technology, Head of the Department of Humanitarian Studies and Dr. Muntasir Hassan Al-Hafiyan , College of Education. Then the questionnaire was distributed to learners of English Language at Sudan University who

expressed their opinions towards the items of the questionnaire. Then it was analyzed statistically.

3-4. Reliability of the Study:

Reliability was calculated using Cranach's alpha equation shown below:

Reliability of the Study:

Reliability coefficient = $\frac{n}{n-1} (1 - \frac{\sum \text{Total variations questions}}{N})$
variation college grades

Cronbach alpha coefficient = (0.73), a reliability coefficient is high and it indicates the stability of the scale and the validity of the study.

3-5. Validity of the Study:

Validity coefficient shows that there is a high sincerity of the scale and that prove the benefit of the study, so reliability coefficient is (0.85) according to the analysis.

CHAPTER FOUR

DATA ANALYSIS

CHAPTER FOUR

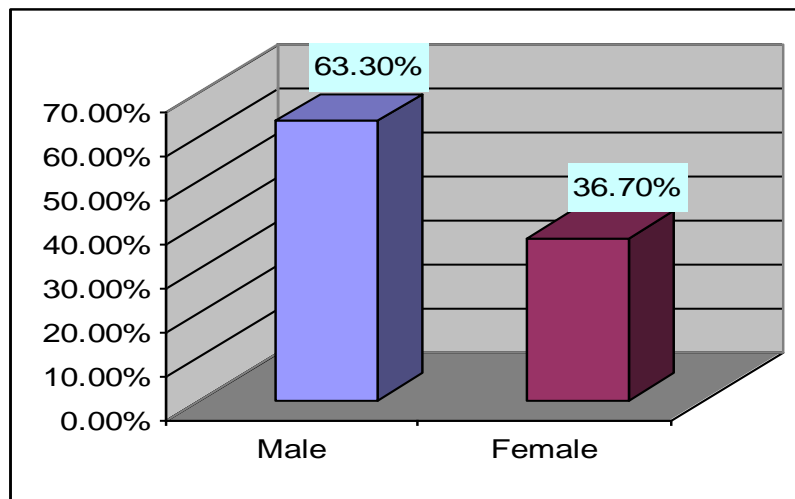
DATA ANALYSIS

4-1. Introduction:

This chapter presents statistical analysis of the data collected via the questionnaire. The analysis is provided by the SPSS programme then an illustration for every statement of the questionnaire is provided below each table and figure. This chapter is also designed to identify, describe and explain the answers of some students who have expressed their opinions towards the study.

4-2 Sex

Statement	Frequency	Per cent
Male	19	63.3%
Female	11	36.7%
Total	30	100.0%



It can be note from the table and figure above that the distribution of the sample by sex is (63.3%) male and (36.7%) female.

4-2 The Questionnaire Analysis:

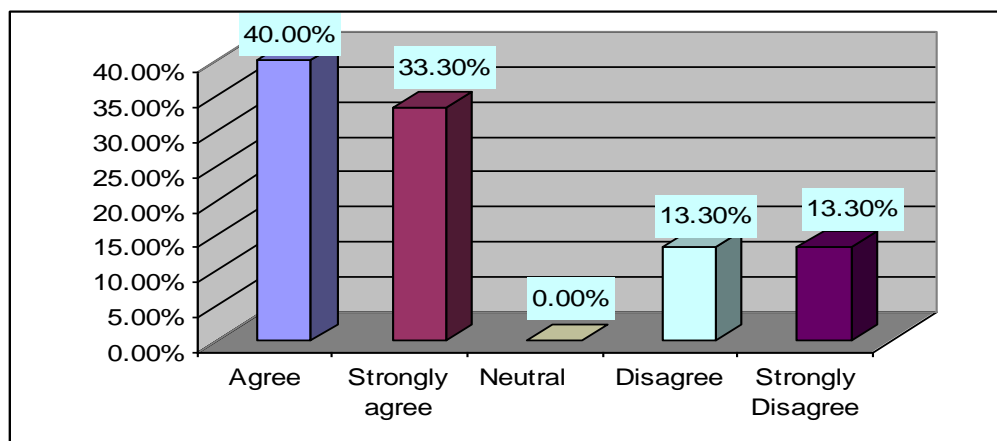
The following is the statistical analysis for the items of the questionnaire that consists of three domains and was distributed to undergraduate students who have expressed their point of views towards the study.

4.2. 1. Vocabulary is easily acquired via learners' incidental interaction.

Table (4.1)

valid	Frequency	Percent
Agree	12	40.0%
Strongly agree	10	33.3%
Neutral	00	00.0%
Disagree	04	13.3%
Strongly Disagree	04	13.3%
Total	30	100.0%

Figure (4.1)



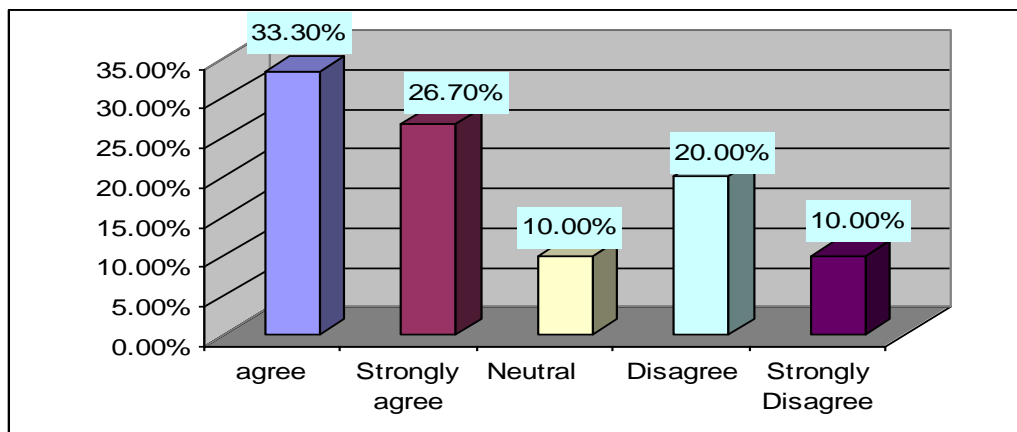
The table (4.1) and figure (4.1) above show the percentages of the respondents who have expressed their opinions towards the above statement. According to the analysis above a vast majority of respondents (73.3%) support the statement, whereas (26.3%) of the respondents expressed their disagreement with the statement; therefore, respondents believed that vocabulary is easily acquired via learners' incidental interaction. On the light of the above analysis the statement has positively supported the first hypothesis.

Students are expected to score significantly high when they acquire vocabulary communicatively.

Table (4.2)

valid	Frequency	Percent
agree	10	33.3%
Strongly agree	08	26.7%
Neutral	03	10.0%
Disagree	06	20.0%
Strongly Disagree	03	10.0%
Total	30	100.0%

Figure (4.2)



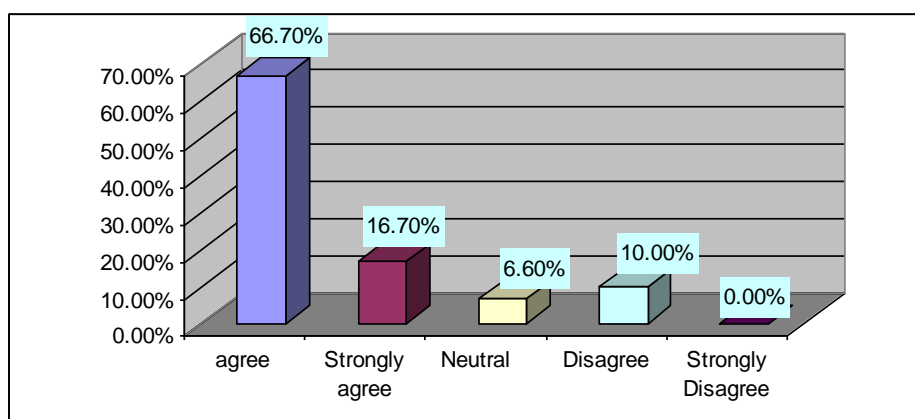
The table (4.2) and figure (4.2) above explain the percentages of the respondents to the statement that students are expected to score significantly high when they acquire vocabulary communicatively reached (60%) of the respondents who are in favor of the statement, while the percentages of those who disagree with the statement are estimated by (30.0%). Therefore, the statement has positively supported the first hypothesis true.

4.2.3. Incidental vocabulary learning needs ample and repeated exposure to the same word in a variety of texts.

Table (4.3)

valid	Frequency	Percent
agree	20	66.7%
Strongly agree	05	16.7%
Neutral	02	06.6%
Disagree	03	10.0%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.3)



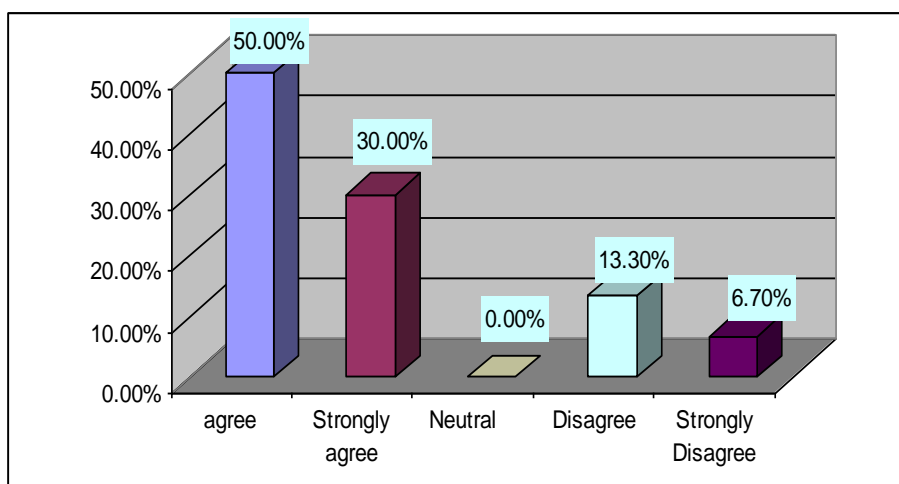
The table (4.3) and figure (4.3) above show the percentages of the respondents who have expressed their opinions towards the above statement. According to the analysis above a vast majority of respondents (83.4%) support the statement, whereas only (10%) of the respondents expressed their disagreement. Therefore, it is strongly believed that Incidental vocabulary learning needs ample and repeated exposure to the same word in a variety of texts. On the light of the above analysis the statement strongly supports the first hypothesis

4.2.4. Learners who are involved in experimental group can automatically acquire new vocabulary.

Table (4.4)

Valid	Frequency	Percent
agree	15	50.0%
Strongly agree	09	30.0%
Neutral	00	00.0%
Disagree	04	13.3%
Strongly Disagree	02	06.7%
Total	30	100.0%

Figure (4.4)



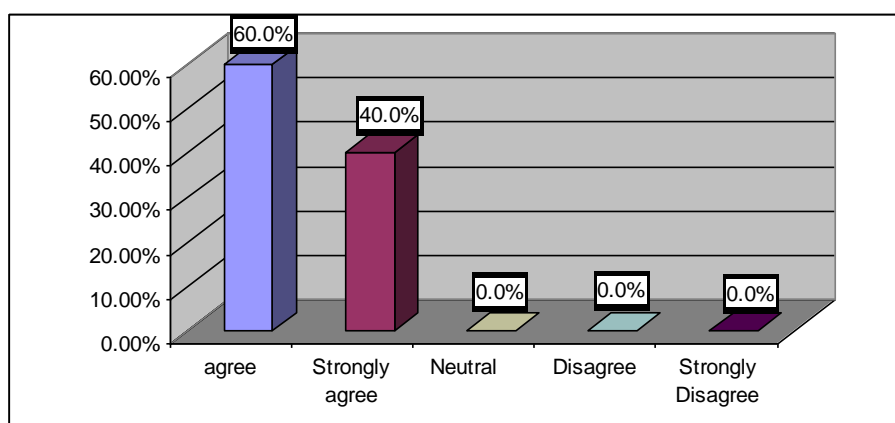
The table (4.4) and figure (4.4) above illustrate the percentages of the respondents who have expressed their options concerning the above statement. According to the analysis above, a vast majority of respondents (80%) support the statement, whereas (20%) of the respondents have expressed their disagreement with the statement. Therefore, the majority of the respondents strongly believed that learners can automatically acquire new vocabulary when they are involved in experimental group and depending on what is mentioned above the first hypothesis is greatly supported by this statement.

4.2.5. Incidental word learning enhances students’ ability to acquire word meaning incidentally from written texts.

Table (4.5)

Valid	Frequency	Percent
agree	18	60.0%
Strongly agree	12	40.0%
Neutral	00	00.0%
Disagree	00	00.0%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.5)



The table (4.5) and figure (4.5) above show the percentages of the respondents who expressed their agreement with the above statement reached (100%) which indicates that the statement is completely supported by all respondents that means none of the respondents have expressed their disagreement with the statement and the analysis proves that Incidental word learning enhances students’ ability to acquire word meaning incidentally from written texts. According to the analysis the statement has strongly supported the first hypothesis.

- **Result report concerning the first hypothesis:**

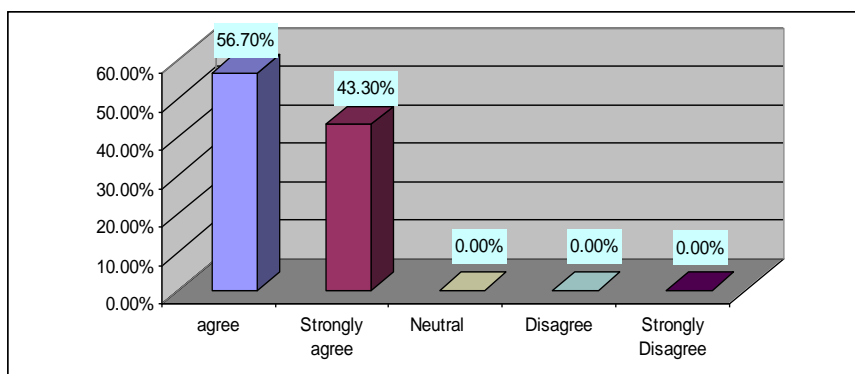
After the comparing and calculation of the sub-hypotheses; it has been found that the total percentage of all sub-hypotheses percentages concerning the first main hypothesis is (79.3%) which represents positive response; therefore, the first hypothesis has been confirmed by its all sub-assumptions and it has been achieved.

4.2.6. Vocabulary pronunciation is apparently acquired in English systematic classes.

Table (4.6)

Valid	Frequency	Percent
Agree	17	56.7%
Strongly agree	13	43.3%
Neutral	00	00.0%
Disagree	00	00.0%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.6)



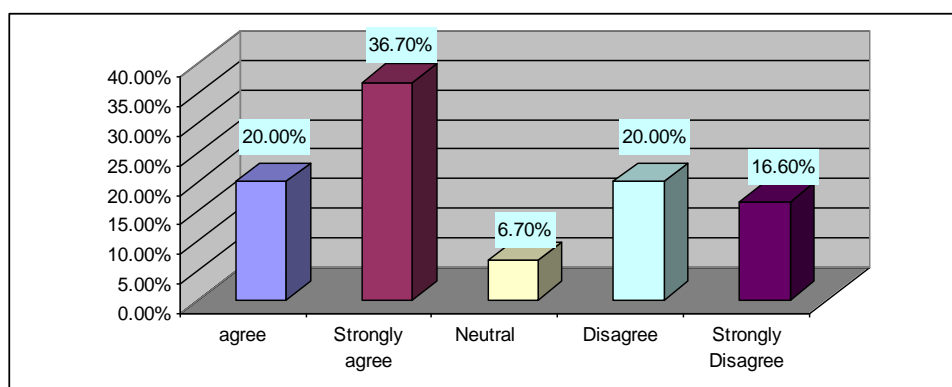
The table (4.6) and figure (4.6) above show the percentages of the respondents who expressed their agreement with the above statement reached (100%) which indicates that the statement is completely supported by all respondents in other words none of the respondents has expressed their disagreement with the statement and the analysis proves that vocabulary pronunciation is apparently acquired in English systematic classes. According to the analysis the statement has completely supported the second hypothesis.

4.2.7. Performing dialogues enhances students' ability to acquire intentional vocabulary.

Table (4.7)

Valid	Frequency	Percent
Agree	06	20.0%
Strongly agree	11	36.7%
Neutral	02	06.7%
Disagree	06	20.0%
Strongly Disagree	05	16.6%
Total	30	100.0%

Figure (4.7)



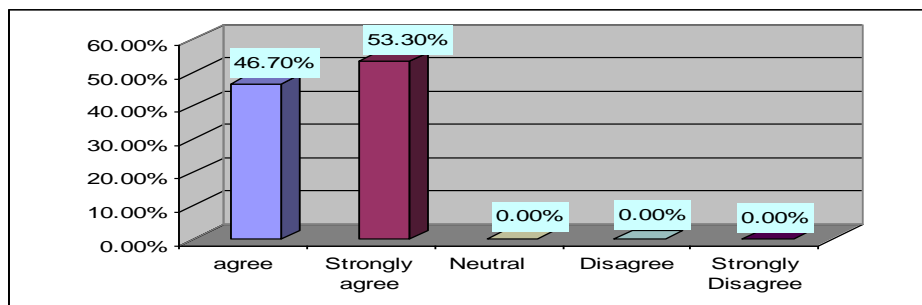
The table(4.7)and figure(4.7)above explain the percentages of the respondents to the statement that performing dialogues enhances students' ability to acquire intentional vocabulary reached (56.7%) of the respondents who are in favor of the statement, while the percentages of those who disagree with the statement are estimated by (36.6%); therefore, the statement has positively supported the second hypothesis.

4.2.8. Visual aids are highly interesting to learn vocabulary intentionally.

Table (4.8)

Valid	Frequency	Percent
Agree	14	46.7%
Strongly agree	16	53.3%
Neutral	00	00.0%
Disagree	00	00.0%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.8)



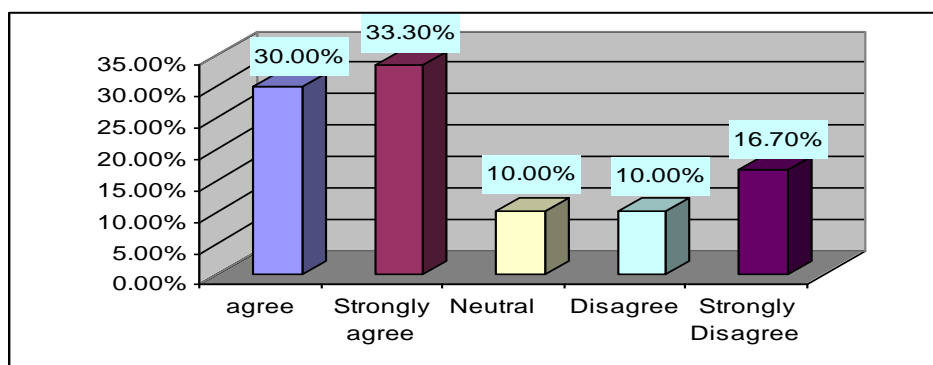
The table (4.8) and figure (4.8) above show the percentages of the respondents who expressed their agreement with the above statement reached (100%) which indicates that the statement is completely supported by all respondents that means none of the respondents have expressed their disagreement with the statement and the analysis proves that Visual aids are highly interested in leaning vocabulary intentionally. According to the analysis the statement has strongly completely supported the second hypothesis.

4.2.9. Vocabulary meaning can be inferred contextually through listening to intentional discussions.

Table (4.9)

Valid	Frequency	Percent
Agree	09	30.0%
Strongly agree	10	33.3%
Neutral	03	10.0%
Disagree	03	10.0%
Strongly Disagree	05	16.7%
Total	30	100.0%

Figure (4.9)



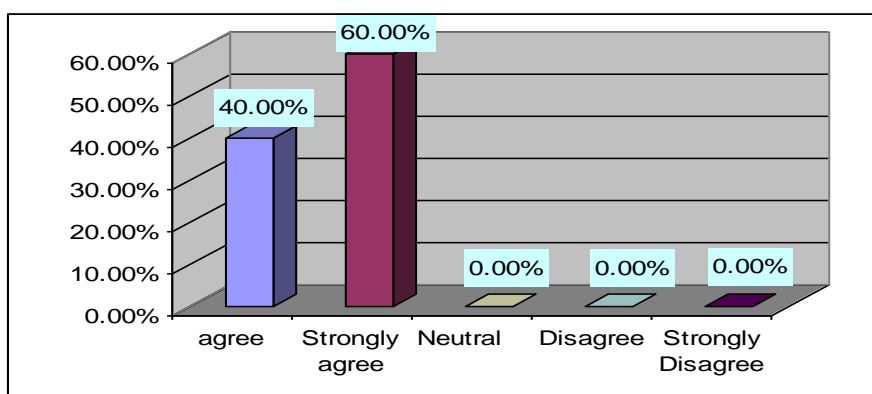
The table(4.9) and figure(4.9)above illustrate the percentage of the respondents who support the above mentioned statement by (63.3), the percentage of those who disagree with the statement reached (26.7%). And in comparing the two percentages, it has been found that the statement is supported by the respondents and it confirmed the second hypothesis.

4.2.10. Learners’ motivation of newly learned words helps in their retention to be used in various situations.

Table (4.10)

Valid	Frequency	Percent
Agree	12	40.0%
Strongly agree	18	60.0%
Neutral	00	00.0%
Disagree	00	00.0%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.10)



The table (4.10) and figure (4.10) above show the percentages of the respondents who expressed their agreement with the above statement reached (100%) which indicates that the statement is completely supported by all respondents that means none of the respondents have expressed their disagreement with the statement and the analysis proves that Learners’ motivation of newly learned words helps in their retention to be used in various situations.. According to this analysis the statement has completely supported the second hypothesis.

- **Result report concerning the second hypothesis:**

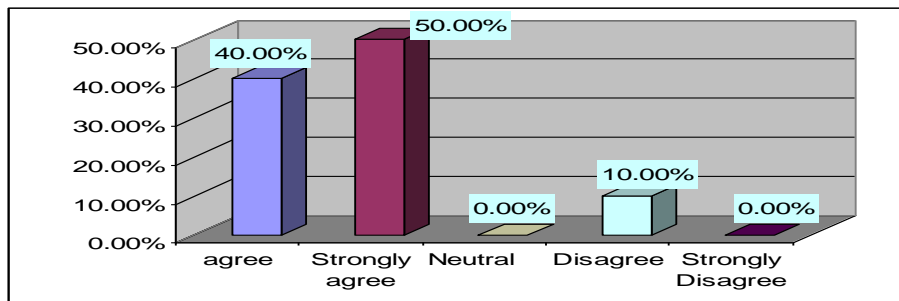
After comparing and calculation of the sub-hypotheses percentages; it has been discovered that the total percentage of the above sub-hypotheses percentages concerning the second main hypothesis is (84%) which represents positive response; therefore, the second hypothesis has been strongly confirmed by its all sub-assumptions and it has been achieved.

4.2.11.The learners' use of English – Arabic dictionaries is a helpful strategy in vocabulary learning.

Table (4.11)

Valid	Frequency	Percent
Agree	12	40.0%
Strongly agree	15	50.0%
Neutral	00	00.0%
Disagree	03	10.0%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.11)



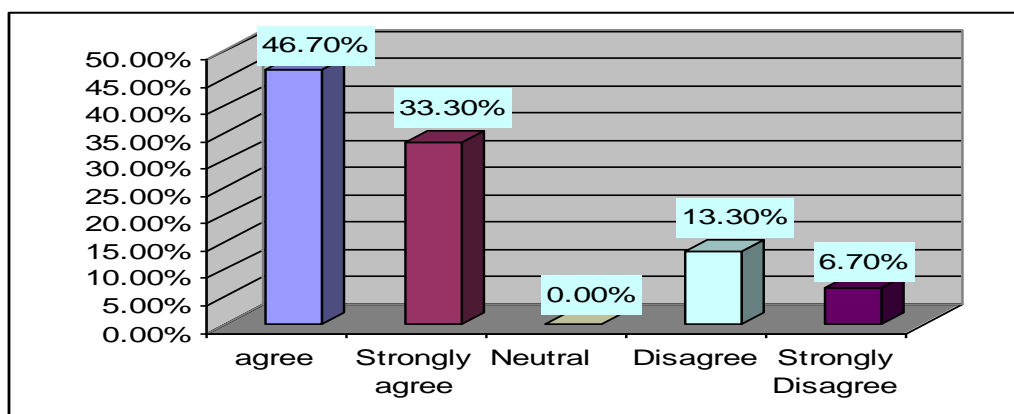
The table (4.11) and figure (4.11)above illustrate the percentages of the respondents who have expressed their opinions concerning the above statement. According to the analysis above, a vast majority of respondents (90%) support the statement, whereas only (10%) of the respondents have expressed their disagreement with the statement; therefore, a vast majority of the respondents strongly believed that the use of Arabic language should be minimized as possible as teachers can in English language classes and depending on what is mentioned above the third hypothesis is strongly supported by this statement.

4.2.12. Students who are subjected to a formal restricted syllabus need Arabic translation where necessary.

Table (4.12)

Valid	Frequency	Percent
Agree	14	46.7%
Strongly agree	10	33.3%
Neutral	00	00.0%
Disagree	04	13.3%
Strongly Disagree	02	06.7%
Total	30	100.0%

Figure (4.12)



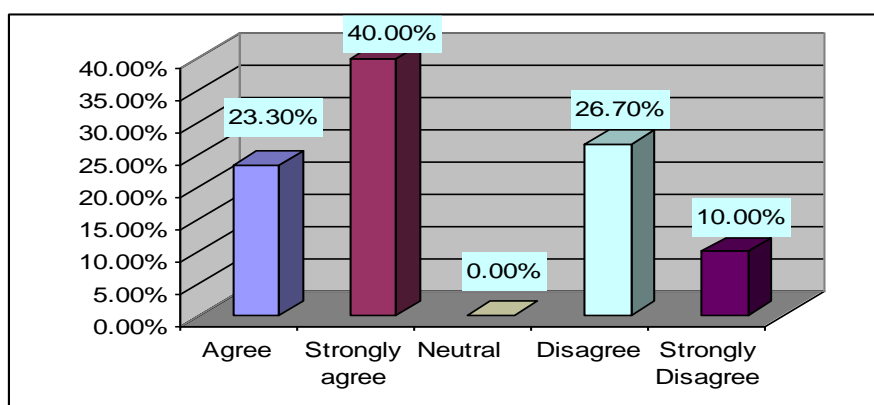
The table(4.12)and figure (4.12)above illustrate the percentages of the respondents who have expressed their options concerning the above statement. According to the analysis above, a vast majority of respondents (80%) support the statement, whereas (20%) of the respondents have expressed their disagreement with the statement; therefore, the majority of the respondents strongly believed that Students who are subjected to a formal restricted syllabus need Arabic translation where necessary, and depending on what is mentioned above the third hypothesis is strongly supported by this statement.

4.2.13. Exposing learners to learning through the medium of (English – English) help them better in learning vocabulary.

Table (4.13)

Valid	Frequency	Percent
Agree	07	23.3%
Strongly agree	12	40.0%
Neutral	00	00.0%
Disagree	08	26.7%
Strongly Disagree	03	10.0%
Total	30	100.0%

Figure (4. 13)



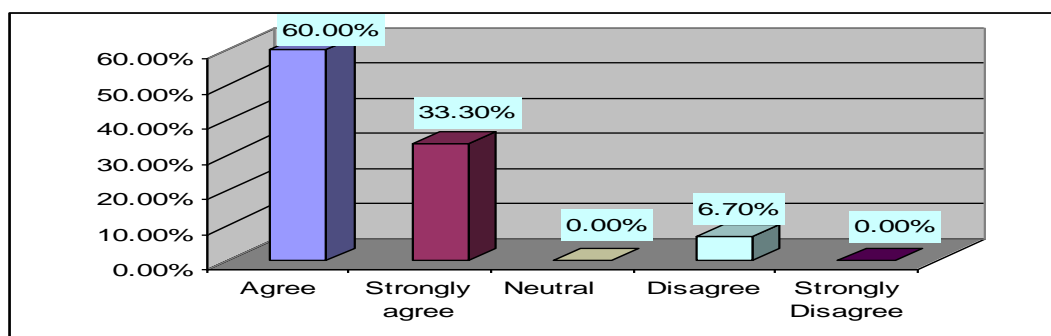
The table(4.13) and figure(4.13)above illustrate the percentages of respondents who have expressed their points of views on the above statement. According to the analysis above (63.3%) of the respondents have expressed their agreement with the statement, whereas (36.7%) of respondents expressed their disagreement; therefore the statement is supported by respondents and it has positively confirmed the third hypothesis.

4.2.14. The use of Arabic language should be minimized as possible as teachers can in English language classes.

Table (4.14)

Valid	Frequency	Percent
Agree	18	60.0%
Strongly agree	10	33.3%
Neutral	00	00.0%
Disagree	04	06.7%
Strongly Disagree	00	00.0%
Total	30	100.0%

Figure (4.14)



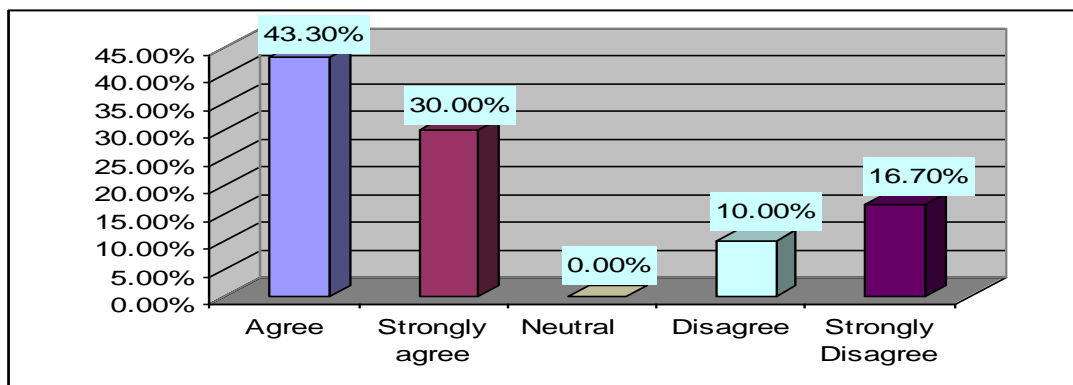
The table (4.14) and figure (4.14) above illustrate the percentages of the respondents who have expressed their options concerning the above statement. According to the analysis above, a vast majority of respondents (93.3%) support the statement, whereas (6.7%) of the respondents have expressed their disagreement with the statement; therefore, the majority of the respondents strongly believed that the use of Arabic language should be minimized as possible as teachers can in English language classes and depending on what is mentioned above the third hypothesis is strongly supported by this statement.

4.2.15. Students who receive full English- Arabic translation face difficulties when they are tested.

Table (4.15)

Valid	Frequency	Percent
Agree	13	43.3%
Strongly agree	09	30.0%
Neutral	00	00.0%
Disagree	03	10.0%
Strongly Disagree	05	16.7%
Total	30	100.0%

Figure (4.15)



The above table (4.15) and figure (4.15) illustrate the percentages of the respondents who are in favor of the above statement which stipulates that Students who receive full English- Arabic translation face difficulties when they are tested represent (73.3%), while those who disagree with the above statement represent (26.6). According to what is mentioned above, the statement is largely supported by the respondents; therefore, the statement has positively asserted the third hypothesis.

• Result report concerning the third hypothesis:

After comparing and calculation of the sub-hypotheses percentages; it has been discovered that the total percentage of the above sub-hypotheses percentages concerning the third hypothesis is (80%) which represents positive response; therefore, the third hypothesis has been strongly confirmed by its all sub-assumptions and it has been achieved.

Conclusion of the chapter:

This chapter includes statistical analysis of the data which was collected via the tool of the study- the questionnaire. The analysis presents each statement in table and figure.

1. Result report concerning the first hypothesis – learners can easily acquire vocabulary intentionally when they interact with each other. It has been found that the total percentage of all sub-hypotheses percentages concerning the first main hypothesis saying that learners can easily acquire vocabulary intentionally when they interact with each other is (79.3%) which represents positive response; therefore, the first hypothesis has been confirmed by its all sub-assumptions and it has been achieved.
2. Result report concerning the second hypothesis – incidental vocabulary learning is effectively done via an ample exposure to the same word in various texts. After comparing and calculation of the sub-hypotheses percentages; it has been discovered that the total percentage of the above sub-hypotheses percentages concerning the second main hypothesis is (84%) which represents positive response; therefore, the second hypothesis has been strongly confirmed by its all sub-assumptions and it has been achieved.
3. Result report concerning the third hypothesis – A minimum use of Arabic can help further improve students' performance. After comparing and calculation of the sub-hypotheses percentages; it has been discovered that the total percentage of the above sub-

hypotheses percentages concerning the third hypothesis is (80%) which represents positive response; therefore, the third hypothesis has been strongly confirmed by its all sub-assumptions and it has been achieved.

CHAPTER FIVE
SUMMARY, FINDINGS,
RECOMMENDATIONS AND
SUGGESTIONS FOR FURTHER
STUDIES

Chapter Five

5-1 Introduction:

This chapter includes summary of the previous chapters, in addition to the findings and recommendations built on what has been achieved through this study and some suggestions as well.

5-2 Conclusion:

This study aims at investigating the effective strategies of incidental and intentional vocabulary learning.

Chapter one provided a general description of the field of the study and outlined the purpose of the study and the objectives of the study. To achieve these objectives the researcher determined three hypotheses which are stated to be tested. In chapter two a general review of literature in the field of writing formal letter is given. Chapter three contains the methodology of the research with regard to population, sampling, instrument, validity and reliability. In chapter four, the data obtained from the questionnaire was analysed through SPSS analysis and discussed.

Findings of the Study:

1. Learners who acquire vocabulary communicatively are expected to score significantly high.
2. Learners can easily acquire vocabulary intentionally when they interact with each other.
3. Incidental vocabulary learning is effectively done via an ample exposure to the same word in various texts.
4. Listening to an intentional discussion is a helpful strategy in inferring new words meaning
5. Learners are strongly motivated to acquire and retain new vocabulary when it is used in a variety of situations.

6. Arabic translation is occasionally used to learners who are subjected to a restricted syllabus.
7. Exposing learners to English – English medium is an interested strategy in acquiring and using vocabulary.

Recommendations of the Study:

1. Visual aids should be used effectively in learning vocabulary intentionally.
2. Learners have to be motivated through inserting new words in a variety of situations.
3. Learners have to use English- Arabic dictionaries to acquire both meaning and pronunciation.
4. The use of Arabic translation should be minimized as possible, and can be adopted only when it is unavoidable.
5. Learners should be exposed to intensive real interactive situations.

Suggestions of the Study:

1. Extra studies regarding the effects incidental and intentional vocabulary learning strategies must be conducted for more and useful findings.
2. Researches must go deeper to investigate the impact of using translation in learning vocabulary.
3. Researchers should examine the role of the interactive situations in acquiring new vocabulary in terms of pronunciation as well as meaning.
4. The researcher suggests with more studies to be conducted in the area of vocabulary by the learners of English language so as to enhance the performance.

Appendix: Questionnaire.

1. Learners can easily acquire vocabulary intentionally when they interact with each other .

Statements	Strongly agree	agree	Neutral	Strongly Disagree	disagree
1. Vocabulary is easily acquired via learners' incidental interaction.					
2. Students are expected to score significantly high when they acquire vocabulary communicatively.					
3. Incidental vocabulary learning needs ample and repeated exposure to the same word in a variety of texts.					
4. Learners who are involved in experimental group can automatically acquire new vocabulary.					
5. Incidental word learning will enhance students' ability to acquire word meaning incidentally from written texts.					

2. Incidental vocabulary learning is effectively done via an ample exposure to the same word in various texts.

Statements	Strongly agree	agree	Neutral	Strongly Disagree	disagree
1. Vocabulary pronunciation is apparently acquired in English systemic classes.					
2. Performing dialogues enhances students' ability to acquire vocabulary.					
3. Visual aids are highly interested in learning vocabulary.					
4. Vocabulary meaning can be inferred contextually through listening to intentional discussions.					
5. Learners' activation of newly learned words helps in their retention to be used in various situations.					

3. A minimum use of Arabic will help further improve students understanding of English texts.

Statements	Strongly agree	Agree	Neutral	Strongly disagree	disagree
1. The learners' use of English – Arabic dictionaries is a helpful strategy in vocabulary learning.					
2. Students who subject to a formal restricted syllabus need Arabic translation where necessary.					
3. Exposing learners to learning through the medium of (English – English) help them better in learning vocabulary.					
4. The use of Arabic language should be minimized as possible as teachers can in English language classes.					
5. Students who receive full English – Arabic translation face difficulties when they are tested.					

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