Vocabulary Learning Strategies Used by AFL (Arabic as a Foreign Language) Learners in Saudi Arabia

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.
Abstract

This study investigates vocabulary learning strategies used by AFL learners in Saudi Arabia. It seeks to explore the relationship between vocabulary strategy use and success. Further, the study aims to examine the effect of certain individual, situational and social factors on the use of vocabulary learning strategies. The methodological approach adopted for this study is a combination of a ‘multiple cases’ approach and survey. The purpose of the multiple cases is to identify vocabulary learning strategies employed by successful and less successful learners of Arabic. The survey, on the other hand, has been conducted to examine variations in vocabulary strategy use according to the following factors: students’ first language, proficiency level, level of achievement, course type, the variety of Arabic used out of class, and religious identity.

The results of the multiple cases demonstrate that there are major differences between the two groups of students in the seven categories of vocabulary learning adopted in this study, namely, non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorization, practice, metacognitive strategies, and expanding lexical knowledge. Moreover, the data of the multiple cases identified three levels of strategies. The first level is termed the ‘main strategy level’, which includes the seven main categories mentioned above. The second and third levels are termed the ‘strategy level’ and the ‘substrategy level’ respectively. The multiple cases data also show that students seem to use vocabulary learning strategies in particular combinations and certain orders.

The results of the survey indicate that the two situational factors (course type and variety of Arabic used out of class) investigated in this study seem to have a fairly strong relationship with vocabulary strategy use. The individual factors (students’ first language, proficiency level and level of achievement) examined in this study, on the other hand, appear to have a very weak relationship with the use of vocabulary learning strategies and finally the social factor (religious identity) appears to have some relationship with vocabulary strategy use.
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Chapter One

INTRODUCTION

1.1 Introduction
This chapter describes the background and the rationale of this study of vocabulary learning strategies used by Arabic Foreign Language (AFL) learners in Saudi Arabia. It then states the purpose of the study and the general research questions addressed. The chapter ends with an overview of the methodology and a description of the thesis organisation.

1.2 Background to the Study
In recent years, there has been a growing interest among researchers within the field of second language acquisition in the cognitive strategies students use to learn languages (Wenden & Rubin 1987; Oxford 1990, 1996c; O'Malley & Chamot 1990; McDonough 1995; Cohen 1998). As a consequence, different learning strategies have been identified and a number of taxonomies of learning strategies have been proposed. An understanding of students' learning strategies provides researchers with insights not only into the processes of second language learning but also into strategies of successful and unsuccessful learners.

One aspect of language learning that in the past received little attention (Meara 1980), but now has become a focus of much research, is the learning of vocabulary. The interest in vocabulary learning and teaching has grown rapidly, and works in this field have proliferated (Allen 1983; Carter 1987a; Carter & McCarthy 1988; McCarthy 1990; Nation 1990; Taylor 1990; Hatch & Brown 1995; Schmitt & McCarthy 1997; Schmitt 2000; Read 2000). The significance of vocabulary in learning a second language is now well-known. Vocabulary is now acknowledged to be central to language and of critical importance to the language learner.

While there has been a large body of research into language learning strategies and also vocabulary learning, "the place where they intersect -vocabulary learning strategies- has attracted a noticeable lack of attention" (Schmitt 1997a: 199). This study is an attempt to investigate vocabulary learning strategies used by a group of students learning Arabic as a foreign language in Saudi Arabia.
It should be mentioned that the Teaching of Arabic as a Foreign Language (TAFL) has witnessed some improvements in the last thirty years, particularly in Saudi Arabia. Much consideration has been given to teaching methods and course design. However, individual differences and the role of the learner in the learning process have received very little attention from both teachers and researchers. While there are numerous studies in the TESOL context examining the use of learning strategies among learners, to the best of my knowledge, only one study on language learning strategies has been carried out in the TAFL context in Saudi Arabia (Al-‘abdān & Al-duwish 1997). This study, therefore, seeks to contribute to the remedying of this deficiency by investigating the vocabulary learning strategies of AFL learners in Saudi Arabia.

1.3 Rationale for the Study

1.3.1 The need for such research in the TAFL context

In the TESOL context, there has been a growing interest in changing the focus from the traditional teacher-centred classroom to a learner-centred one (e.g., Nunan 1988; Tudor 1996). Related to this, there has been a large body of research into assessing learners' strategies. Unfortunately, little or none of this focus on the learner has been applied in the TAFL context (Mustapha 1990), nor has there been any attempt to describe vocabulary learning strategies in the TAFL context (cf. Sieny & Kashu 1995). Given the current recognition that more attention should be given to the learner and the learning process, the TAFL field has for some years been in need of some research into the learning processes and learning strategies: “professionals in the field [TAFL] are aware that in this decade, serious and basic research has to be done on second language acquisition” (Elgibali & Taha 1995: 80). This study will be the first empirical research of any scale conducted on vocabulary learning strategies regarding AFL learners in Saudi Arabia (see 1.3.6 for information about some important features of Arabic).
1.3.2 Implicit and explicit processes in vocabulary acquisition

It is believed that vocabulary acquisition reflects both implicit and explicit learning processes:

[T]he recognition and production aspects of vocabulary learning rely on implicit learning, but meaning and mediational aspects of vocabulary heavily involve explicit, conscious learning processes (Ellis 1994: 212)

These two aspects (implicit and explicit) of vocabulary acquisition, therefore, appear to work in complementary ways (Schmitt 2000), yet while the former has been studied extensively (e.g. Coady & Huckin 1997), the conscious learning process has been rather neglected. The focus of the literature would seem to suggest that most vocabulary learning in L2 occurs through incidental learning, such as from reading. However, while some “vocabulary learning by reading...is possible, ...it must be regarded as being only one possible method of vocabulary...[learning] alongside others” (Scherfer 1993: 1148, my emphasis). Furthermore, the notion that reading is the best way of learning L2 vocabulary is not supported empirically (Raptis 1997; Horst, Cobb & Meara 1998). It should not be overlooked, moreover, that L2 learners do indeed pay attention to new vocabulary and make conscious efforts to learn this vocabulary and to expand their lexical knowledge, and as Ellis points out, “learners’ acquisition of new vocabulary can be strongly facilitated by the use of a range of metacognitive strategies” (Ellis 1995: 107). This is a fact which should not be ignored, and teachers and researchers alike “should not overemphasise the incidental/indirect...acquisition of words at the expense of intentional and direct studying of vocabulary” (Gu & Johnson 1996:646). This study focuses on the field of explicit vocabulary learning, so it is a contribution to this second aspect of vocabulary acquisition.

1.3.3 The importance of explicit learning strategies in vocabulary learning

Within the relatively fast growing field of research into learner strategies in second language learning, the study of vocabulary learning strategies deserves particular attention for a number of reasons. First, much of the theoretical and pedagogical literature on second language education has stressed the importance of lexis for the development of second language learning (Richards 1976; Gass 1989). Second, learner knowledge of and ability to use vocabulary is believed to be partially...
conditioned by the way the learner has been taught, and partially by the way new words are learnt (Faerch, Haastrup & Phillipson 1984), and the learning strategies adopted may “radically affect the way in which [learners] learn new words” (Parry 1991: 649). Third, vocabulary knowledge is one of the main aspects of second language learning that can be learnt and expanded by the individual independently; it “is incremental, potentially limitless, and heavily constrained by the individual’s experience” (Swain & Carrol 1987: 193). This individual nature of vocabulary learning highlights the importance of learners’ strategies.

Fourth, another aspect of vocabulary learning which may set it apart from other aspects of language is that the amount of vocabulary a foreign student needs will often be very large, and teachers cannot teach students all the vocabulary they will need, so each student is expected to be responsible for much of his/her own learning, and this responsibility will entail employing various conscious strategies. Fifth, the identification of strategies adopted by learners for vocabulary learning might be crucial in understanding the acquisition of lexis because these strategies “are an important aspect of lexical learning...[and can] contribute to a better understanding of how [second language learners] come to learn the lexis of the target language” (Sanaoui 1995: 25). Thus, a full picture of vocabulary skill development should include consideration of learning strategies. The following quotations illustrate clearly the importance of learning strategies in vocabulary learning:

> If we know more about learner strategies and what works and what does not work well, we can help learners acquire more profitable strategies. (Hatch & Brown 1995: 37)

> Strategies which learners can use independently of a teacher are the most important of all ways of learning vocabulary. (Nation 1990: 174)

> Regardless of how much instruction we do in schools, students will actually do most of their word learning independently...Thus, information on the approaches students will and will not use would be helpful. (Graves 1987: 177)

Despite the recognised significance of vocabulary learning strategies, the empirical research that has been conducted to investigate learners’ use of such strategies is limited, and is not commensurate with their importance in the language learning process (Meara 1983, 1987, 1992; and Qian 1993).
1.3.4 Current strategy research

Obviously, the amount of research that has focused on the identification, description, and classification of learning strategies in general is much greater than the amount that has been done to train students in using strategies (Cohen 1998), and the limited success of some training programmes (O’Malley & Chamot 1990) highlights the need to conduct more research to assess students’ learning strategies (McDonough 1995). Rees-Miller (1993) states that teachers need to proceed with caution in the use of strategy training in the classroom until more research has been conducted.

The situation with vocabulary is the reverse. While there has been considerable training research on some vocabulary learning techniques (e.g., the keyword method), studies directed toward identifying students’ strategies in dealing with foreign vocabulary are comparatively very few in number (Lessard-Clouston 1994, 1996). According to Oxford and Crookall (1990: 26), a training programme on vocabulary learning (or any language learning skill) should be commenced by exploring the “expectations and current vocabulary learning techniques” used by students. So, research in order to assess learners’ strategies may be more useful and revealing in the area of vocabulary learning than any other aspect of second language learning. The present situation, thus, calls for more research on vocabulary learning strategies.

In addition, a number of studies on language learning strategies (O’Malley et al. 1985a; Oxford et al. 1996) revealed that vocabulary learning enjoyed a wider use of strategies than other learning activities such as grammar learning or listening comprehension. These findings call for more research into vocabulary learning strategies specifically in order to get a clearer picture of the nature of learning behaviour associated with vocabulary learning.

1.3.5 Students may behave differently in different environments

To my knowledge, no research has been carried out on vocabulary learning strategies with regard to AFL learners in Saudi Arabia. It is generally recommended that research on learning strategies be conducted in a variety of different contexts under different learning conditions (Politzer & McGroarty 1985; Green & Oxford 1995;
Oxford & Burry-stock 1995). The significance of doing research in different educational contexts lies in the fact that the way learners behave in one learning environment is not necessarily the same as or similar to what learners do in other environments (Kauraogo 1993; LoCastro 1994). The use of learning strategies is heavily influenced by the whole context of the learning situation, including the classroom culture and ethos (Williams & Burden 1997). Consequently, learners of Arabic at the Institute of Teaching Arabic to Non-Arabs (ITANA) in Saudi Arabia may display some patterns of strategy use in vocabulary learning different from those which have been reported in the contemporary literature.

1.3.6 Learning some languages may be different from learning others
It may be the language distance between L1 and L2 that has an impact on the type of strategies used. However, the nature of the language being learnt will also have an effect on strategy use, and this is what examined in this section.

There is evidence to suggest that the learning of some languages results in greater strategy use than others: “different target languages...might have major influences in language learning strategy selection” (Oxford 1996b: 249). Chamot, O'Maley, Kupper & Impink-Hernandez (1987), for example, found that students of Russian reported greater strategy use than students of Spanish. Politzer (1983) also found that learners of Spanish used fewer strategies than those of French and German. In the field of vocabulary learning strategies, the results of Stoffer's (1995) study (see 3.3.14 for more details about this study) also confirm this conclusion. Stoffer found that learners of Japanese and Russian reported using more strategies than students of Spanish, French and German. Meara (1984) also suggests that different languages may have different techniques for word storage and handling, and “present quite different learning problems to individual learners” (Meara 1996: 33). As a result, Meara (1996) calls for research into vocabulary acquisition outside the Indo-European languages, and he complains that “most of the current research still looks at a very restricted range of languages...[t]o my knowledge, there is, for example, no work on the acquisition of Chinese or Arabic vocabularies by English speakers” (p. 37, my emphasis). Arabic words are very different from words in Indo-European languages. In Indo-European languages, words tend to be made up of a relatively
stable root, and a system of affixes that are added on to this stem. Arabic words are based instead on a root that normally consists of three consonants, and these three consonants can be combined with different patterns of vowels to produce a whole family of words that share an associated meaning. In addition, diglossia (that is the existence of two different sets of words which often have the same referent, one for formal use and the other for informal use) is an extremely important feature of Arabic (section 2.3.1). Another key feature of Arabic is the short vowels. Short vowels which are written above or below the consonant they follow (they are not written in most modern Arabic texts) play an important role in determining the meaning of words (A detailed description of the Arabic language is presented in section 2.3 in Chapter Two, and language distance is discussed in 4.4.1.1). The present study, by examining vocabulary learning strategies used by AFL learners in Saudi Arabia can, therefore, contribute significantly to the existing body of knowledge on the topic.

1.4 The Purpose of the Study

The purpose of the present investigation into vocabulary learning strategies is twofold: first, to explore the relationship between the use of vocabulary learning strategies and success in language learning by identifying and comparing the strategies that are used by both “successful” and “less successful” learners of Arabic in Saudi Arabia; and second, to examine the effect of certain individual, situational and social factors, which are relevant to the TAFL context in Saudi Arabia, on the use of vocabulary learning strategies by AFL learners.

1.5 Research Questions

This study is an attempt to answer the following three main questions:

RQ1: What are the vocabulary learning strategies employed by the successful and less successful learners of Arabic as a Foreign Language (AFL) in the study?

RQ2: Does the use of vocabulary learning strategies vary significantly according to certain individual, situational and social factors?

RQ3: Do students adopt specific strategies to cope with the problem of diglossia?
1.6 Overview of the Methodology

As explained in detail in Chapter Five, the methodological approach adopted for this study is a combination of a 'multiple cases' approach (qualitative) and survey (quantitative). The purpose of the multiple cases is to identify vocabulary learning strategies used by some successful and less successful learners of Arabic. The survey has been conducted to examine variations in vocabulary strategy use according to the following factors: students’ first language, proficiency level, level of achievement, course type, the variety of Arabic used outside class, and religious identity. The data collection instruments of the study include:

- Diary-keeping followed by interview.
- Semi-structured interview following classroom observation.
- Structured questionnaire.
- Unstructured interview.
- Two background questionnaires.

1.7 Organisation of the Thesis

This thesis is comprised of eight chapters. Chapter One presents the background, rationale, purpose, research questions and overview of the methodology pursued. It also describes the organisation of the thesis. Chapter Two provides background information about the TAFL context in Saudi Arabia and Arabic language.

Chapter Three is a literature review. This chapter discusses issues relating to the definition of language learning strategies. It also reviews empirical studies on vocabulary learning strategies. Finally, it examines some taxonomies of language learning strategies and of vocabulary learning strategies.

Chapter Four discusses the research issues for investigating vocabulary learning strategies in the TAFL context. It includes a description of a proposed classification of vocabulary learning strategies to serve as a general framework for this study. This chapter also discusses issues relating to the relationship between vocabulary strategy use and success. Finally, it examines the factors associated with vocabulary strategy use that were investigated in this study.
Chapter Five is an explanation of the methodology of the study. It describes the design of the instruments used in the multiple cases, the implementation of the pilot study, and the adjustments that needed to be made to the methodology of the multiple cases in the main data collection phase. It also describes the process of developing the Vocabulary Strategy Questionnaire (VSQ) and its piloting.

Chapter Six analyses the data and reports the results of the multiple cases. Chapter Seven analyses the data and reports the findings of the survey. Chapter Eight is a discussion of the major findings of the study. It also discusses the implications of the research findings for the teaching and learning of Arabic vocabulary, and provides suggestions for future research.
Chapter Two

BACKGROUND INFORMATION

2.1 Introduction

This chapter is divided into two main sections. The first section provides a detailed account of the Teaching of Arabic as a Foreign Language (TAFL) in Saudi Arabia, particularly at the Institute of Teaching Arabic to Non-Arabs (ITANA) where the present study of vocabulary learning strategies was applied. A background introduction to the TAFL situation in Saudi Arabia is necessary to understand the context of this study and to facilitate later discussion of the findings. In the second section, a linguistic description of Arabic will be given. This chapter, therefore, serves as a background chapter for the present study of vocabulary learning strategies.

2.2 Teaching Arabic as a Foreign Language

2.2.1 TAFL in Saudi Arabia

There are three TAFL centres apart from ITANA in Saudi Arabia. The oldest institute in Saudi Arabia which specialises in teaching Arabic as a foreign language is the Arabic language division in Madinah. It is part of the Arabic College in the Islamic University. The institute sets out to prepare Muslim students who have been granted academic scholarships, by developing their ability to speak Arabic, so that they will be capable of continuing their studies in the various colleges, particularly the College of Sharī'ah and Islamic Studies and the College of Da'wah and the Principles of Islamic Religion.

The second centre is the Arabic Language Institute in Riyadh, which is an affiliate of the King Sa'ūd University. It was established in 1974 with the following aims: to teach Arabic to foreign students, to train teachers of Arabic as a foreign language, and to carry out studies related to TAFL. The last centre is the Arabic Language Institute in Makkah, which is an affiliate of the University of Um Al-Qura. This centre operates according to the following objectives: to teach Arabic language and literature to non-Arabic speaking Muslims, to train teachers of Arabic, to carry out studies in the field, and to cooperate with other organisations in this field. ITANA is
very similar to the three institutes in terms of its goals and function, and it will be described in the following sub-section.

2.2.2 TAFL at ITANA

The Institute of Teaching Arabic to Non-Arabs (ITANA), where this study of vocabulary learning strategies has been conducted, was first established in 1977, as a centre affiliated to the Arabic Language College within Al-Imam Muhammad Ibn Sa'ūd Islamic University in Riyadh. In 1981 the centre was converted into an independent educational unit under the name of the Institute of Teaching Arabic to Non-Arabs with the objective of training non-Arabic speaking Muslim learners to a level at which they can communicate comfortably in Arabic and enrol in the colleges of Shārī'ah, Principles of Religion or Arabic Language within the University. It also accepts non-Muslim students in the evening programme (2.2.2.2). The Institute also aims to train and prepare teachers in the Arabic language and religious sciences, and to qualify them linguistically and educationally. The Institute also organises training seminars and courses for these teachers and assists in developing curricula and teaching methods in Arabic and Islamic schools. The Institute is comprised of the following departments: the linguistic preparation department, the Arabic language and Islamic Sciences department, the department for the training of teachers of Arabic as a foreign language, and the research unit. ITANA provides two programmes (courses) in TAFL within the department of linguistic preparation. These two programmes are described below.

2.2.2.1 The morning programme

The Core Programme (intensive) aims at qualifying and preparing the students from the linguistic point of view, so that they are capable of continuing their studies in one of the University colleges. The duration of study is two academic years and the programme is divided into four levels, each spanning one academic term of sixteen weeks. This course is held in the morning, five hours a day, five days a week. Examinations are taken on completion of each level in order to see whether students are ready to proceed to the next level. A graduate from this programme is awarded a Diploma in Language Preparation.
Students who join this course come to Saudi Arabia primarily to study Arabic, and the curriculum is designed to meet these students' objectives. All the students are Muslims and their reason for learning Arabic is to acquire the ability to read and understand Standard Arabic. Many of them are also interested in going on to higher education in Arab universities, particularly in Saudi Arabia. The majority of these students live free of charge in the students' accommodation on the University Campus. As will be shown later (5.5.3), the participants in the multiple cases of this study of vocabulary learning strategies have been selected from learners studying in this programme. Table 2.1 below illustrates the study plan for this programme.

<table>
<thead>
<tr>
<th>Subjects</th>
<th>First level (16 weeks)</th>
<th>Second level (16 weeks)</th>
<th>Third level (16 weeks)</th>
<th>Fourth level (16 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of hours per week</td>
<td>No. of hours per week</td>
<td>No. of hours per week</td>
<td>No. of hours per week</td>
</tr>
<tr>
<td>Holy Quran and Interpretation</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Tawheed (Theology)</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Fiqh (Jurisprudence)</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hadeeth</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>History</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Listening comprehension</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Conversation</td>
<td>7</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Composition</td>
<td>-</td>
<td>5</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Writing</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Reading</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Grammar</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Morphology</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Literature</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Rhetoric</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Total hours of teaching</td>
<td>400</td>
<td>400</td>
<td>400</td>
<td>400</td>
</tr>
</tbody>
</table>

Table 2.1. The study plan of the morning programme

2.2.2.2 The evening programme

The Language Course Programme (non-intensive) is held during the evenings for those people who work in Saudi Arabia and who do not speak Arabic, and are unable to attend daytime courses due to their work commitments. The objectives of the programme are to enable students to understand spoken and written Arabic, speak Arabic fluently, read Arabic comfortably, and write in Arabic. In addition, it aims at providing Muslim students with sufficient Arabic to enable them to increase their
knowledge of Islam, and enabling non-Muslim students to understand Islam and to appreciate Islamic civilisation, culture, history, heritage and Arabic literature. This programme lasts for a period of three years and is divided into six levels: the Elementary level (a), the Elementary level (b), the Intermediate level (a), the Intermediate level (b), the Advanced level (a) and the Advanced level (b). Each level lasts sixteen weeks. Students on this course study only on two days for six hours a week. As with the morning course, examinations are held when the students finish each level. Some of the students on this course are Muslims and some are not. Most of the students learn Arabic in order to be able to communicate well, and to understand the media. For reasons explained later (5.5.3), learners studying in this programme have participated only in the survey part of the present study of vocabulary learning strategies. Table 2.2 below shows the study plan for this programme.

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>Elementary Course (a) (16 weeks)</th>
<th>Elementary Course (b) (16 weeks)</th>
<th>Intermediate Course (a) (16 weeks)</th>
<th>Intermediate Course (b) (16 weeks)</th>
<th>Advanced Course (a) (16 weeks)</th>
<th>Advanced Course (b) (16 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Hours per week</td>
<td>No. of Hours per week</td>
<td>No. of Hours per week</td>
<td>No. of Hours per week</td>
<td>No. of Hours per week</td>
<td>No. of Hours per week</td>
</tr>
<tr>
<td>Listening &amp;</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>speaking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Writing</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Grammar</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Composition</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total hours</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>of teaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2.2 The study plan of the evening programme

2.2.2.3 Textbooks
At ITANA, the Teaching Arabic Series, which consists of thirty-seven textbooks, is the core syllabus. It is a complete curriculum, comprising TAFL and the principles of Islamic Sciences. The general aims of this series are 1) to qualify learners to study at university level, 2) to enable learners to speak, read and write fluently, 3) to enable
learners to understand the media, and 4) to provide learners with satisfactory religious instruction. This series is written in Standard Arabic (2.3.1), and it is used for both the morning and evening programmes.

2.2.2.4 TAFL classes
The teaching style followed at ITANA is generally a teacher-centred one. The teaching method is a traditional one which is based on rote learning rather than improving language skills through communication. The teacher-learner relationship is relatively formal. The role of the learner as active agent in his/her own learning is still ignored. Teachers rarely take into account different learning styles and strategies, even though some teachers might attempt to deal with individual differences on an ad hoc basis.

All teachers are native speakers of Arabic. They all hold a degree in Arabic Language or Islamic Studies, plus an MA or diploma in TAFL obtained from an Arab university. One notable advantage is the fact that the size of the classes is relatively small, ranging from ten to twenty students per class.

2.3 The Arabic Language
Arabic belongs to the Semitic group of languages. It is the official language in all Arabic countries. Arabic is a synthetic, or inflectional, language rather than an analytic language, so there are major differences between the structure of Arabic and that of English or other Indo-European languages. In simple terms, the syntactic relationship of nouns in Arabic is indicated by case endings and verbs are inflected by means of prefixes, infixes, and suffixes to indicate the various persons, numbers, genders, derived forms, moods, and tenses, in contrast to English where, for example, a separate word (noun or pronoun) is required to indicate the person. In the following sections, the diglossic nature of Arabic, Arabic orthography, the morphological system and lexicon of Arabic are described. Finally, the complexity of vocabulary knowledge in Arabic is discussed (see Wright 1951 and Holes 1995 for more details about Arabic language).
2.3.1 The phenomenon of diglossia

Diglossia has been defined as “a relatively stable language situation in which, in addition to the primary dialects of the language (which may include a standard or regional standards), there is a very divergent, highly codified (often grammatically more complex) superposed variety, the vehicle of a large and respected body of written literature, either of an earlier period or in another speech community, which is learned largely by formal education and is used for most written and formal spoken purposes but is not used by any sector of the community for ordinary conversation.” (Ferguson 1959: 336).

Consistent with the above definition, there are two levels of Arabic found in all parts of the Arabic-speaking world. On the one hand, there is Modern Standard Arabic (MSA) which is used in formal situations, e.g. formal speeches, public lectures, broadcasting, books and newspapers, and is understood throughout the Arab world. All school materials in all subjects are also written in MSA. It should be noted that MSA is based on and inspired by Classical Arabic – the language of the Quran, pre-Islamic poetry, and the medieval classics of Arabic literature - and although it has developed and acquired new vocabulary, it has kept in line with the characteristic morphological, grammatical and syntactic properties of Classical Arabic. MSA is the variety taught at ITANA and the term Standard Arabic is used in this study of vocabulary learning strategies to refer to MSA.

On the other hand, each region has its own particular colloquial form of the language that is used in informal conversations. This Colloquial Arabic is the actual language of everyday activities, mainly spoken, and varies not only from one country to another, but also from one area to another within each country. However, there is in each case a standard or semi-standard colloquial form based on the dialect of the capital city. In Saudi Arabia, for example, Riyadh dialect can be considered the standard colloquial (see Prochazka 1988 for a survey and a description of the dialects of Saudi Arabia, and Aboheimed 1991 for a comparison between Standard Arabic and Riyadh or Najdi dialect). These dialects are often dramatically different from Standard Arabic in structure and vocabulary (Ryding 1995).
This diglossic situation in Arabic poses a problem to learners of Arabic as a foreign language in presenting them with two varieties of the language and with double sets of vocabulary items to learn. It is very common in Arabic to find different words in different dialects (including Standard Arabic) for the same content or thought, for example, \( /fawilah/ \) and \( /tarabiyah/ \) for table\(^1\). Dealing with this diglossic situation in Arabic classrooms is one of the “most formidable challenge[s] that faces the teaching [of Arabic]” (Al-Batal 1995: 119). Furthermore, foreign students always need opportunities to use newly acquired vocabulary in natural situations, but in the TAFL context the opportunities for natural interaction with native Arabic speakers are very few since most people speak Colloquial Arabic, which is different from Standard Arabic, the variety that students are learning at ITANA.

In addition, between Standard Arabic and Colloquial Arabic there exists a variety of intermediary Arabic called Educated Spoken Arabic (ESA), described as a result of standard and colloquial fusion and thus containing elements of both spoken and written Arabic. The pronunciation of ESA is very closely related to Standard Arabic and it has a highly classical vocabulary, though there are differences in some aspects of syntax and morphology (cf. Ryding 1991). Educated Arabs of most nationalities use ESA as a medium of spoken communication. It is the current informal language used among educated Arabs, fulfilling their daily language needs (Abdul Aziz 1978, see Mitchell 1986 for more details about ESA).

There are various approaches for handling diglossia within the teaching of Arabic as a foreign language (Aboheimed 1991), which reflect different views about the functions of the language within society. These approaches include:

1) Ignoring Standard Arabic and teaching a selected dialect in order to enable students to become involved in the activities of daily life;

2) The adoption of Educated Spoken Arabic (ESA) because it is used and understood by most educated Arabs (Ryding 1990);

3) Providing two courses, one for Standard Arabic and the second for a chosen dialect;

4) Teaching both Standard Arabic and a dialect simultaneously (Younes 1990); and

\(^1\) Note: irregular spacing is because of combining English and Arabic.
5) The adoption of Standard Arabic only. (For more details about how the diglossic nature of Arabic has been dealt with in the classroom, see Al-Batal 1992, Younes 1990, 1995).

In ITANA, Standard Arabic is the variety of Arabic taught. However, some teachers at ITANA use ESA with their students in or out of class.

In the following sections, a description of orthography, morphology and lexicon of Standard Arabic is provided.

2.3.2 Arabic orthography (script)
The Arabic writing system, like the English system, is an alphabetic logographic script where individual letters are assembled in order to create meaningful items (Mitchell 1953). But, unlike European languages, Arabic is written from right to left. The alphabet consists of twenty-eight letters (twenty-nine if /hamzah/ is counted as a separate letter), which are all consonants, although three of them i.e. /alif/, /waw/, and /yaa/, are also used as long vowels or diphthongs. Arabic also has three short vowels (sounds), and there are no capital letters. The script is a cursive one, in which most of the letters are written in slightly different forms according to whether they stand alone or are joined to a following or preceding letter. The basic part of the letter, however, remains unchanged. Some Arabic letters are attachable only to letters preceding them, and some are attachable to letters preceding and following them. This feature of Arabic orthography constitutes a major difficulty in Arabic writing for non-native speakers (Al-Juhany 1990). Moreover, some letters have a similar shape and are distinguished only by the presence/absence, position or number of superscript or subscript dots. Every letter has four different forms, viz. isolated, initial, medial and final. Table 2.3 below illustrates the Arabic letters.

<table>
<thead>
<tr>
<th>Names of the letters</th>
<th>Isolated form</th>
<th>Transcription</th>
</tr>
</thead>
<tbody>
<tr>
<td>ألف</td>
<td>أ</td>
<td>a (a, ā)</td>
</tr>
<tr>
<td>باء</td>
<td>ب</td>
<td>b</td>
</tr>
<tr>
<td>تاء</td>
<td>ت</td>
<td>t</td>
</tr>
<tr>
<td>Arabic</td>
<td>English</td>
<td>Arabic</td>
</tr>
<tr>
<td>--------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>تاء</td>
<td>th</td>
<td>تاء</td>
</tr>
<tr>
<td>حيم</td>
<td>j</td>
<td>حيم</td>
</tr>
<tr>
<td>حاء</td>
<td>h</td>
<td>حاء</td>
</tr>
<tr>
<td>حاء</td>
<td>kh</td>
<td>حاء</td>
</tr>
<tr>
<td>دال</td>
<td>d</td>
<td>دال</td>
</tr>
<tr>
<td>ذال</td>
<td>dh</td>
<td>ذال</td>
</tr>
<tr>
<td>راء</td>
<td>r</td>
<td>راء</td>
</tr>
<tr>
<td>زاي</td>
<td>z</td>
<td>زاي</td>
</tr>
<tr>
<td>سين</td>
<td>s</td>
<td>سين</td>
</tr>
<tr>
<td>شين</td>
<td>sh</td>
<td>شين</td>
</tr>
<tr>
<td>صاد</td>
<td>ṣ</td>
<td>صاد</td>
</tr>
<tr>
<td>ضاد</td>
<td>ḍ</td>
<td>ضاد</td>
</tr>
<tr>
<td>طاء</td>
<td>ṭ</td>
<td>طاء</td>
</tr>
<tr>
<td>ظاء</td>
<td>ẓ̣</td>
<td>ظاء</td>
</tr>
<tr>
<td>عين</td>
<td>َ</td>
<td>عين</td>
</tr>
<tr>
<td>غين</td>
<td>gh</td>
<td>غين</td>
</tr>
<tr>
<td>فاء</td>
<td>f</td>
<td>فاء</td>
</tr>
<tr>
<td>قاف</td>
<td>q</td>
<td>قاف</td>
</tr>
<tr>
<td>كاف</td>
<td>k</td>
<td>كاف</td>
</tr>
<tr>
<td>لام</td>
<td>ḷ</td>
<td>لام</td>
</tr>
<tr>
<td>ميم</td>
<td>ṃ</td>
<td>ميم</td>
</tr>
<tr>
<td>نون</td>
<td>ṇ</td>
<td>نون</td>
</tr>
<tr>
<td>هاء</td>
<td>ḥ</td>
<td>هاء</td>
</tr>
<tr>
<td>و</td>
<td>w (u, ū, aw)</td>
<td>و</td>
</tr>
<tr>
<td>ياء</td>
<td>y (i, i, ay)</td>
<td>ياء</td>
</tr>
</tbody>
</table>

Table 2.3 Arabic letters

In Arabic, short vowels are indicated by diacritics and written above or below the consonant they follow. The signs of these three vowels are respectively:

1. **/fathah/**, a small diagonal stroke (') above a consonant.
2. ضمة /dammah/, a small /wāw/ (ٍ) above a consonant.

3. كسرة /kasrah/, a small diagonal stroke (ٌ) under a consonant.

In addition to the three vowel signs, there is another sign called /sukūn/ which indicates the absence of a vowel after a consonant. It consists of a small circle written above the consonant and it never appears at the beginning of a word. When a consonant occurs twice without a vowel between, it is written only once and the sign (ٌ), called /shaddah/ is written above it. Letters which have /shaddah/ above them are commonly said to be مضمف /muḍaf ‘doubled’. Unfortunately, in most modern written and printed Arabic, no vowel signs, /sukūn/ or /shaddah/ are given, and the reader has to deduce them, and this feature of written Arabic causes problems for AFL learners, particularly low-proficiency students. Regarding حمزة /hamzah/, the rules governing its writing are complicated and vary according to its position within the word, and they cause problems not only for foreign learners, but also for native speakers of Arabic.

In Arabic, at the ends of nouns and adjectives, when indefinite, the vowel signs are written double. This means that they are to be pronounced with a final “n”. This is called تونين /tanwīn/ or nunation. When the noun is definite, it is indicated by the definite article ال /al/ ‘the’, prefixed to the noun as one word. Although the definite article has the same written shape, its pronunciation differs according to the following letter, which causes a problem for foreign learners. Although there is no indefinite article in Arabic, the presence of تونين indicates that the noun on which it is used is an indefinite noun.

Spelling in Arabic is regular in the sense that words are spelt as they are pronounced. This does not mean that Arabic learners have no problems with Arabic spelling. Obviously, spelling difficulties in Arabic do not arise, as is the case in the spelling of
English, out of irregularities in the sound-symbol relationship; instead, difficulties come from learners' inability to discriminate between certain sounds, e.g. short vowels and long vowels (Al-Juhany 1990). Moreover, in certain words there are some redundant letters, which are written but not pronounced. On the other hand, some words contain letters which are pronounced but should not be written. This feature is evidence of the difficulty of Arabic writing (Al-Juhany 1990). Generally speaking, the Arabic writing system is one of the major difficulties encountered by foreign learners (Burj 1978), particularly students with a low-proficiency level (see Mitchell 1953 for a detailed description of the Arabic writing system).

2.3.3 Arabic morphology

The most characteristic feature of the Arabic language is that the great majority of its words are built up from (or can be analysed down into) roots, each of which consists of three consonants or radicals. A large number of four-radical verbal roots also exists in Arabic, but they are far out-numbered by the three-radical verbal roots. By using these radicals as a base and by varying the vowelling of the simple root, and adding prefixes, infixes, and suffixes, according to certain patterns, the actual words are produced. Thus, from the root 

اصحاب /sallama/ ‘to deliver’,

أسلم /aslama/ ‘to submit (also, to turn Muslim),

اسلم /istalama/ ‘to receive’,

استسلم /istaslama/ ‘to surrender’,

سلام /salâm/ ‘peace’,

سلامات /salâmāt/ ‘safety, well-being’, and

مسلم /muslim/ ‘a Muslim’.

Word forms derived from the triliteral roots, which retain the three basic consonants, have associated patterns of meaning. This feature can help a great deal in the
acquisition of Arabic vocabulary. In Arabic, there are three parts of speech: verbs, nouns, and particles.

### 2.3.3.1 Verbs

The concept of verb is the same in Arabic as in English. Arabic verbs have only two tenses: perfect and imperfect. In reality, these are not tenses, as the distinction between them is not that of time. Rather, they indicate whether an action is complete or not. The perfect denotes completed action, and the imperfect denotes an incompletely action, irrespective of time. It is usually the case that the Arabic perfect is equivalent to the English past and that the Arabic imperfect is equivalent to the English present or future. In the perfect, the finite verb is formed by means of suffixes which strongly resemble the personal pronouns. In the imperfect, prefixes and suffixes are both used.

Each root in Arabic has the potentiality of being expanded, by the systematic addition of one or more affixes, into many other derived forms. Each of these derived forms bears a specific semantic relationship to the simple verb. For example, قتل /qatala/ means ‘kill’, but قتل قتل /qattala/ (with doubling of the middle radical) means ‘slaughter’. Similarly, قتال /taqţala/ (with prefixed ت and a lengthening of the vowel of the first radical ق) means ‘fight one another’, and قتال /qultala/ is the passive voice form of the verb.

All Arabic verbs, theoretically, are subject to a series of possible modifications of form, some of which are in general use, and which entail corresponding modifications in meaning, including passivity, transitivity, intransitivity, intensification, the seeking of the fulfilment of an action etc. The devices employed in the formation of these derived forms include, gemination (doubling) of root consonants, vowel lengthening, prefixation, infixation and various combinations of these.
Regarding prefixes, some of them indicate the tense and the case of the verb attached to it. Other prefixes determine the features of the subject (person, gender and number). As for suffixes, some determine the tense, the case of the verb, and the subject features, whereas other suffixes determine the features of the first object pronoun (person, gender and number), or of the second object pronoun. It should be noted that the vowelisation of the different prefixes and suffixes is fixed, but the vowelisation of the last character of the stem is influenced by the suffix attached to it. However, there some irregular verbs (e.g. مضعنٌ /muḍa‘af/ ‘doubled’ [its second and third letters are identical in the triliteral, and its first and third letters and its second and fourth letters are identical in the quadriliteral] and معنَلٌ /muṭall/ ‘defective’ [includes one or two defective letters among its radicals]) which need special treatment after being generated using the morphological rules.

2.3.3.2 Nouns

In Arabic, adjectives, adverbs, and pronouns (in addition to proper nouns) are classified as nouns. However, nouns -like verbs- are distinguished by the wealth of derivatives from the root. For instance, from the root كَتَبٌ /KB/ ‘write’ are formed, among others, the following nouns:

كتاب /kātīb/ ‘writer’,

مكتوب /maktūb/ ‘something written,

كتابة /kitābah/ ‘writing’,

كتاب /kitāb/ ‘book’, and

مكتب /maktab/ ‘office’.

Regarding the adjective, it is only a noun used to describe and is not considered a separate part of speech. Not every noun pattern lends itself to this dual noun-adjective usage, but many do. For example، جميل /jamīl/ ‘pretty’ and كريم /karīm/ ‘generous’ can be used either as nouns or as adjectives. The adjective in Arabic is always placed after the noun, and it must agree with the noun that it qualifies. As for
adverbs, the common way of rendering an adverb is to use the corresponding adjective in the accusative.

Arabic nouns can be divided into two types: denominative nouns and deverbal nouns. The first type is formed from other nouns, whereas the second one is derived from verbs. The patterns of denominative nouns can be divided into two classes: primary and derivative. The majority of the primary patterns are triliteral such as دم /damm/ ‘blood’ and يد /yadd/ ‘hand’. Those which have fewer or more than three radicals, such as فندق /fundug/ ‘hotel’, constitute a small portion of Arabic nouns. The derivative patterns may be formed either by internal change affecting the original consonants and/or vowels, or by adding external phonemes to the original root. These phonemes are usually defined as حروف الزِيادة ‘letters of addition’, consists of ا، ع، ي، ت، ن، ر، س، ل.

The deverbal nouns include verbal nouns, participles, the nouns of place, time and instrument, and nouns of instance and kind. Like verbs, a deverbal noun is formed by adding prefixes and suffixes to the stem. Regarding prefixes, some serve only like conjunctions, others determine the case of the noun, and different prefixes indicate whether the deverbal noun is declared with ال ‘the’. With respect to suffixes, some determine whether the noun is feminine with ة. Others indicate the case of the noun and whether it is dual, masculine sound plural, or feminine sound plural, and different kinds of suffixes determine the feature of the object pronouns. As in the case of verbs, there are some irregular deverbal nouns in which their deverbal forms generated from the morphological rules differ from their orthographical realisations that appear in written text (Holes 1995).

Number
There are in Arabic three numbers, vis., singular, dual, and plural. As regards plural, there are two kinds: the regular or sound plural which is formed by the addition of suffixes to the singular and the irregular or broken plural formed by internal vowel
change, or by the addition of prefixes, infixes and suffixes, according to one of more than thirty patterns. Some examples of such plurals include

والد /walad/ ‘boy’, the plural of which is أولاد /awlād/ ‘boys’ and
قلب /qalb/ ‘heart’, the plural of which is قلوب /qulab/ ‘hearts’.

The dual category is -like sound plurals- also expressed by adding suffixes.

Gender
All the nouns in Arabic are either masculine or feminine, as there is no neuter gender. The most common way of making the feminine form of a word is to add the suffix (ة) to the masculine form. However, there are exceptions, as some feminine nouns lack this gender marker such as شمس /shams/ ‘sun’, and some masculine nouns have feminine suffixes such as خليفة /khalīfah/ ‘caliph’.

Pronouns
Pronouns consist of personal pronouns, demonstrative pronouns, relative pronouns and interrogative pronouns. Aside from the compound pronoun –ل /iyyāl + “a pronominal suffix”, the personal pronouns have two forms, “free” and “bound”. The Arabic system of relative pronouns is relatively complex because of the existence of a variety of forms depending on the number, gender or case of each pronoun. Demonstratives agree in general with the number and gender of the object referred to.

2.3.3.3 Particles
The particle is a word which does not convey any complete meaning until another word is added to it, and does not have true roots or true patterns. Particles include conjunctions, prepositions, and interjections. Arab grammarians used the term ‘letters’ for particles. Arabic letters or particles are divided into three groups. The first group is used only with nouns, the second group is used only with verbs, and the third group is used with both nouns and verbs.
2.3.4 Arabic lexicon

The Arabic lexicon is structured by the various patterns for derivation of nouns and verbs from existing roots, and most dictionaries are organised around these roots. The historical Arabic Lexicon includes a vast number of words from different areas and epochs. Thus, the lexicon of Standard Arabic is very rich. This richness is, as Ferguson (1968) pointed out, the result of the long continued use of Classical Arabic and its constant enrichment from dialect borrowings and new coinages. In practice, only a small portion of this vast accumulated vocabulary is used.

At all periods in its history, there have been borrowings into Arabic, primarily from Indo-European and Semitic Languages, and a number of loanwords have been recognised in the Holy Quran. In the modern period, the various colloquial dialects have absorbed foreign vocabulary from the foreign cultures with which they have been in contact. However, the scholarly establishment of the Arab World has always resisted the absorption of this vocabulary into the written language. With the recent technological and educational developments that have taken place in the Arab World, a need has arisen for the transfer of technical concepts into Arabic in many fields. This has been done in various ways:

1) Borrowing of a foreign word.
2) Integration of a foreign word morphologically and/or phonologically.
3) Analogical extension of an existing root.
4) Translation of a foreign word.
5) Semantic extension of an existing word.

Arabic language does not favour word composition (called in Arabic خِتَّ /naḥṭ/), though there are some examples in Modern Arabic such as خِتَّ تربة /taḥṭurbah/ ‘subway’. In Arabic there is also a certain tendency toward simple words rather than phrases. Thus for ‘restaurant’, مَطَار ‘matānr’ is used rather than عمل الأكل /mahall ‘al-‘akl/ ‘place for eating’. In addition, in the Arabic language, both metaphor and simile play important parts, especially in Arabic literature.
It is widely held that Arabic is extremely rich in synonyms, that it uses a multitude of synonymous words for denoting the same object or concept. However, some of these synonymous words are not really identical in meaning; there are differences, but these differences are sometimes extremely fine. This wealth of near-synonyms may be of great difficulty for foreign language learners.

Probably no feature of Arabic has attracted more comment, from Islamic Scholars in the earliest times to Western observers today, than the reported existence of a great many of words meaning both one thing and its opposite, such as هاءجدة/hajada/‘to sleep; be awake’, and ثرب/tariba/‘become rich; become poor’. The great majority of such words are no longer used (Holes 1995).

Now the Arabic orthography, Arabic morphology and Arabic lexicon have been described, the following section will discuss the complexity of vocabulary knowledge in Arabic.

2.3.5 The complexity of vocabulary knowledge in Arabic

Vocabulary knowledge is complex and has been defined in various ways, and a great deal has been written on the topic of what is meant by “knowing a word” mostly with relevance to English (Richards 1976; Carter 1987a). According to Nation (1990), knowing a word means knowing its form (spoken and written), its position (grammatical pattern, collocations), its function (frequency, appropriateness), and its meaning (concept, associations). Laufer (1990, 1997a) on the other hand, proposed a slightly different taxonomy of components of word-knowledge, consisting of form (phonological, graphic, morphological), syntactic behaviour, meaning (referential, associative, pragmatic) and relations with other words (paradigmatic and syntagmatic). The above two lists of vocabulary knowledge components although similar, reveal the multifaceted nature of word knowledge (See Hatch & Brown 1995 for a detailed description of the complexities involved in vocabulary knowledge).

In addition to the components of vocabulary knowledge that have been outlined for English above, there are other features, which may be specific to the Arabic lexicon. For example, the knowledge of root forms and word patterns is essential in learning
Arabic words. Nearly all Arabic words can be theoretically reduced to "roots" consisting of three (or sometimes four) radical consonants. Furthermore, these word patterns are valid for a virtually unlimited number of other similar roots, so, if KTB connotes "writing", and QTL "killing", and if KāTiB means "writer", then one is not surprised to learn that QāTiL means "murderer", as this word pattern is applied to produce a "doer" of an action. The ability to deduce the root from the pattern, and to decide which pattern has been imposed on the root, is also an essential skill for the use of an Arabic dictionary. This is because words are usually arranged in Arabic dictionaries, not in continuous alphabetical order according to the word pattern, but in alphabetical order of the roots from which they are derived, so the word KāTiB, for example would be found under the entry for KTB (4.2.2). Although there is a large number of nouns and particles which are not traceable back to a verbal root, they are also arranged in the dictionary as if verbal roots existed for them.

Given the fact that Arabic is morphologically a highly structured language, Arabic morphology is believed to be crucial to the acquisition of Arabic vocabulary, and consequently for word knowledge. For example, knowing how to turn the past verb (whether sound, defective, doubled or intact) into the present or the imperative forms by adding the appropriate affixes, and knowing how to connect different pronouns to different verb forms, to different nouns, and to prepositions are basic skills for learning the Arabic lexicon. Familiarity with a wide range of morphological patterns also leads to increasing success in guessing strategies.

In addition, awareness of the diglossic nature of Arabic, and making a distinction between spoken words and written words are fundamental requirements for the user of Arabic vocabulary. If students are not aware of the diglossic situation and of the fact that some words are only used in formal writing, and other words are employed only in informal conversations, they would make countless sociolinguistic errors in using vocabulary (Younes 1995). On the receptive side, students should also be able to comprehend both standard vocabulary and colloquial vocabulary (ACTFL 1989).

Furthermore, given the fact that short vowels play an important role in Arabic script in determining the meaning of some words, and taking into account that the symbols used to represent these short vowels are almost always absent from modern written
Arabic, the ability to vocalise the consonants by determining the short vowels from context is a very important skill for recognising Arabic words, and foreign learners are required to master this skill as early as possible. However, this aspect of learning Arabic lexical items is found to be one of the major difficulties students face when reading an Arabic text (Al-Juhany 1990).

So, knowing a word in Arabic means:

- Knowing a word’s root and its pattern;
- Knowing how to apply the morphological rules to a word to generate different forms;
- Differentiating between spoken words and written words;
- Knowing how to deduce the short vowels from context.

These elements can be combined with other components (which have been listed at the beginning of this section) to constitute the components of vocabulary knowledge in Arabic.

To most foreign language learners, mastering all these aspects of vocabulary knowledge may be too much to expect of them (Gu 1994), and “the learner may have mastered some of the word’s properties but not the others” (Laufer 1997a: 142). It should be noted that knowledge of a vocabulary item is very often a matter of degree: second language learners (and even native speakers) have only partial knowledge of the meaning of many of the words that they know. Moreover, the knowledge of vocabulary differs greatly from learner to learner, even if they use the same coursebook or the same strategy.

Vocabulary knowledge also involves two aspects: receptive (passive) knowledge and productive (active) knowledge. Passive vocabulary refers to lexical items that can be recognised and understood in the context of reading or listening; active vocabulary refers to items which the learner can use correctly and appropriately in speaking or writing. However, the boundaries between receptive and productive vocabulary are not fixed (Melka 1997), and the relationship between an L2 learner’s passive and active vocabularies remains rather unexplored (Laufer & Paribakht 1998).
Vocabulary knowledge, however, should be viewed as “a continuum between ability to make sense of a word and ability to activate the word automatically for productive purposes” (Faerch, Haastrup & Phillipson 1984: 100). These aspects of vocabulary knowledge may be more complicated in Arabic than in English. This is due to the diglossic nature of Arabic, where learners often have two sets of words to deal with. Receptively, learners of Arabic have to recognise and understand two kinds of lexical items: one for listening (the informal forms), and the other for reading (the formal forms). Productively, AFL learners also have to master the ability to use two types of vocabulary items: one for speaking (in informal conversations) and the other for writing or for formal conversations.

The relation of the notion of receptive and productive vocabulary to learning strategies can be found in the fact that different kinds of strategies may be applied to one or the other of the two aspects of vocabulary knowledge. Thus, some strategies, such as guessing meaning, may contribute more to the passive side of lexical knowledge, while strategies involving practice aid the development of the active side of vocabulary knowledge (Nattinger 1988). In addition, productive learning of vocabulary may involve more time and more strategies than receptive learning.

2.4 Chapter Summary

In this chapter, information about the situation of Teaching Arabic as a Foreign Language (TAFL) in Saudi Arabia was provided. Four TAFL centres in Saudi Arabia were described. The Institute of Teaching Arabic to Non-Arabs in Riyadh (ITANA), where the present study of vocabulary learning strategies was applied, is one of them. ITANA provides two TAFL courses. The first is an intensive course, held in the morning, and the second is a non-intensive course, held in the evening.

In the second part of this chapter, a description of Arabic has been given. It was highlighted that Arabic is diglossic. AFL learners at ITANA study the first variety (Standard Arabic) in the class, and are exposed to the second variety (Colloquial Arabic) outside the class. The chapter also provided a description of Arabic orthography, Arabic morphology and Arabic lexicon. The chapter ended with a discussion of the complexity of vocabulary knowledge in Arabic.
Having provided background information about TAFL in Saudi Arabia and Arabic language, the next chapter is devoted to the review of a literature on vocabulary learning strategies.
Chapter Three

LITERATURE REVIEW

3.1 Introduction

This chapter is organised into three main sections. The first section discusses the definition of the construct “strategy”. The second section is devoted to an examination of the research that has been done on vocabulary learning strategies. The third section considers some classification systems of language learning strategies and also vocabulary learning strategies. The implications of the literature for the present study will be highlighted in bold.

3.2 The Definition of the Construct “Strategy”

In any discussion of learning strategies, some statements regarding the construct of ‘strategy’ itself are needed. This is because a definition of learning strategy is not universally agreed, and there is little consensus as to what actually constitutes a learning strategy (Ellis 1994). Learning strategies have been defined in a number of different ways. Various strategy definitions are presented in Table 3.1 below to demonstrate the variation of emphasis among definitions in the literature.

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition of learning strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bialystok (1978:71)</td>
<td>Optional means for exploiting available information to improve competence in a second language.</td>
</tr>
<tr>
<td>Weinstein &amp; Mayer (1986:315)</td>
<td>Behaviours and thoughts that a learner engages in during learning and that are intended to influence the learner’s encoding process.</td>
</tr>
<tr>
<td>Chamot (1987:71)</td>
<td>Techniques, approaches, or deliberate actions that students take in order to facilitate the learning and recall of both linguistic and content area information.</td>
</tr>
<tr>
<td>Rubin (1987:23)</td>
<td>They contribute to the development of the language system which the learner constructs and affect learning directly.</td>
</tr>
<tr>
<td>Wenden (1987:6)</td>
<td>Language learning behaviours learners actually engage in to learn and regulate the learning of a second language.</td>
</tr>
<tr>
<td>Kirby (1988:230-231)</td>
<td>A combination of tactics, or a choice among tactics, that forms a coherent plan to solve a problem.</td>
</tr>
<tr>
<td>Schmeck (1988:5)</td>
<td>A sequence of procedures for accomplishing learning, and the specific procedures within this sequence are called learning tactics.</td>
</tr>
<tr>
<td>Willing (1988:7)</td>
<td>A specific mental procedure for gathering, processing, associating, categorising, rehearsing and retrieving information or patterned skills. It is, in short, an act of learning viewed at the micro-level. It is the basic unit of learning.</td>
</tr>
<tr>
<td>Weinstein (1988:291)</td>
<td>Any behaviours or thoughts that facilitate encoding in such a way that knowledge integration and retrieval are enhanced..... [they] constitute organized plans of action designed to achieve a goal.</td>
</tr>
<tr>
<td>O’Malley &amp; Chamot (1990:1)</td>
<td>The special thoughts or behaviours that individuals use to help them comprehend, learn, or retain new information.</td>
</tr>
</tbody>
</table>
Table 3.1 Selected definitions of learning strategies

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxford (1990:8)</td>
<td>[They] are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferrable to new situations.</td>
</tr>
<tr>
<td>Maclntyre (1994:185)</td>
<td>Techniques to facilitate language learning that are deliberately chosen by the learner.</td>
</tr>
<tr>
<td>Davies (1995:50)</td>
<td>[A] physical or mental action used consciously or unconsciously with the intention of facilitating...learning.</td>
</tr>
<tr>
<td>Cohen (1998:5)</td>
<td>[They] constitute the steps or actions consciously selected by learners either to improve the learning of a second language, the use of it, or both.</td>
</tr>
</tbody>
</table>

It is clear from the definitions provided above that the diversity of definitions of language learning strategies presents a number of problematic issues. Some of these issues (terminology, processing and consciousness) will be considered briefly in the following sub-sections, in order to work towards an operationalisation for this study.

3.2.1 Terminology
In the literature, the concept of strategy has been referred to as a technique (Stern 1975; MacIntyre 1994), tactic (Schmeck 1988), approach (Sanaoui 1995), learning behaviour (Wesche 1979), learning process (Ellis 1985; Nunan 1991), procedure (Farch & Kasper, 1986), move (Sarig 1987), study skill (Rothkopf 1988), problem-solving technique (Barnett 1988) and non-executive skill (Sternberg 1983). Such diversity of terms causes confusion, and some difficulties in relating and synthesizing the various research findings.

3.2.2 Processing
It is not clear whether strategies should be perceived as behavioural or mental or as both. The definitions presented in Table 3.1 above can be categorised into three groups in this respect. The first group sees strategies as essentially behavioural (Wenden 1987; Oxford 1990). The second group views them as mental processes (Willing 1988; Schmeck 1988; Kirby 1988). According to the third group, strategies are both behavioural and mental (Weinstein & Mayer 1986; O'Malley & Chamot 1990).
3.2.3 Consciousness

A controversial issue in defining learning strategies is whether they are to be seen as subconscious or as conscious actions which learners employ intentionally. While Chamot (1987) and MacIntyre (1994) refer to strategies as deliberate actions, some authors (Rubin 1987) have failed to address the consciousness aspect of learning strategies. Rabinowitz and Chi (1987) suggest that strategies must be conscious in order to be strategic, and they should no longer be considered as strategies once they are performed automatically. According to Cohen (1998:4), "the element of consciousness is what distinguishes strategies from those processes that are not strategic". On the other hand, strategies could be both conscious and unconscious according to some definitions (Davies 1995). Nisbet and Shucksmith (1986) also assert that strategy use can be at an unconscious level.

In view of the lack of consensus in the literature concerning the definition of the construct 'strategy', and because of these problematic issues regarding the definition of language learning strategies, both O'Malley and Chamot (1990) and Brown, Bransford, Ferrara and Campione (1983) suggest that, for the purpose of conducting research, specific strategy terms and operational definitions to describe strategic processing should be used. Consequently, the definition of learning strategy used in this study is adapted from Cohen (1998: 5) who argues that learning strategies "constitute the steps or actions consciously selected by learners...to improve the learning of a second language". The focus of this study will therefore be on deliberate actions to learn vocabulary in or out of class.

Moreover, it is important to describe the major attributes of learning strategies in order to clarify what I mean by the term. In this study, Wenden's (1987) list of characteristics of language learning strategies is adopted. She proposed six characteristics of learning strategies:

1. Learning strategies refer to specific actions or techniques, but they are not features which describe a student's broad language learning approach.
2. Some of the learning strategies will be observable, and others will not be observable.
3. Learning strategies are problem-oriented, that is, learners use them to respond to a learning need.
4. Learning strategies can contribute directly or indirectly to learning.
5. Although these strategies may be consciously employed, they can become automatised after a long period.
6. Learning strategies are behaviours which are amenable to change.

One point should be made here regarding Wenden’s list. It relates to the fifth characteristic and its implication for the methodology of the present study. Some automatised strategies may be difficult to identify. Ellis (1994) points out that if strategies become so automatic that the learners are no longer conscious of employing them, they are no longer accessible for description through verbal report by the students and thus lose their significance as strategies. As a result, automatised strategies are beyond the scope of this study. However, this does not mean that they will be ignored if identified. Whatever the case may be, when a particular strategy is identified, it is difficult to decide whether it is automatised or not. Having defined the construct ‘strategy’, a review of vocabulary strategy literature is presented in the following section.

3.3 Vocabulary Strategy Research

The purpose of this section is to review in detail the research that has been done so far on vocabulary learning strategies so as to put this study in its proper research context. The studies will be described roughly chronologically in order to highlight developments in vocabulary learning strategy research. The research reviewed here is that which was designed to assess the use of vocabulary learning strategies by second language learners; this study will be of a similar nature. Therefore, in examining of the research, its relevance to the context of the present study will be discussed. The implications of various studies for the present study will also be highlighted. The research will be reviewed largely in terms of the following:

1. Language of study.
2. The participants: their first languages and ages.
3. The types of strategies investigated.
4. How the relationship between strategy use and success in vocabulary learning has been explored.

The results and data-gathering techniques of each study will also be presented.
The studies on vocabulary learning strategies reviewed in this section are summarised in Table 3.2 below.

<table>
<thead>
<tr>
<th>STUDIES</th>
<th>SETTING</th>
<th>PURPOSE OF STUDY</th>
<th>DATA COLLECTION METHODS</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Henning (1973)</td>
<td>75 learners of English and Persian as a second language</td>
<td>Investigation of how students store vocabulary in memory</td>
<td>Vocabulary-recognition test</td>
<td>Low-level students stored vocabulary according to sound and high-level students stored vocabulary according to meaning</td>
</tr>
<tr>
<td>Papalia &amp; Zampogna (1977)</td>
<td>20 English native speakers learning French and Spanish in the USA</td>
<td>Identification of vocabulary learning strategies</td>
<td>Think-aloud, interview</td>
<td>Identified some types of vocabulary learning strategies (e.g. repetition, games, cooperative learning)</td>
</tr>
<tr>
<td>Ahmed (1988)</td>
<td>300 Arabic native speakers studying English as a foreign language</td>
<td>Identification of micro-strategies used by good and poor students to learn vocabulary</td>
<td>Think-aloud, observation, interview</td>
<td>Found no big difference between learners at the macro-strategy level, but major differences in the choice of specific micro strategies</td>
</tr>
<tr>
<td>Porte (1988)</td>
<td>15 learners (with different native languages) of English as a foreign language in the UK</td>
<td>Investigation of vocabulary learning strategies used by poor learners</td>
<td>Interview</td>
<td>Identified several strategies similar to the behaviours of the good learners reported in the literature</td>
</tr>
<tr>
<td>Payne (1988)</td>
<td>103 university level ESL students (with different native languages)</td>
<td>Finding out how effective students perceive vocabulary learning strategies</td>
<td>Interview, questionnaire</td>
<td>Found positive interaction between learning strategies and learning styles</td>
</tr>
<tr>
<td>Levine &amp; Reves (1990)</td>
<td>60 Israeli first year university EFL students</td>
<td>Investigation of effect of method presentation on vocabulary acquisition</td>
<td>Questionnaire, verbal protocols, learning sheets, retention tests</td>
<td>Identified several vocabulary learning strategies. Method of vocabulary presentation leads to different degrees of vocabulary retention</td>
</tr>
<tr>
<td>Sanaoui (1992)</td>
<td>62 learners (from different cultural backgrounds) of English and French as second languages</td>
<td>Identification of students’ approaches for vocabulary learning</td>
<td>Diaries, group discussions, interview, questionnaire</td>
<td>Identified 2 distinct approaches (structured and unstructured) which differ in 5 aspects. Found correlation between the structured approach and achievement scores.</td>
</tr>
<tr>
<td>Lessard-Clouston (1996)</td>
<td>14 students from different first language backgrounds learning English as a second language in Canada</td>
<td>Identification of students’ approaches for vocabulary learning</td>
<td>Questionnaire</td>
<td>Identified 3 approaches: structured, semi-structured, and unstructured. Found no correlation between the structured approach and achievement scores</td>
</tr>
<tr>
<td>Study</td>
<td>Sample Size</td>
<td>Methods</td>
<td>Strategies Referred</td>
<td>Findings/Results</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
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<td>-------------------------------------------------------------------------</td>
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<td>-----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Shouten-van Parrenen 1992</td>
<td>60 Dutch students learning French as a foreign language in Netherlands</td>
<td>Exploring the differences between strong and weak students in vocabulary learning and reading strategies</td>
<td>Think-aloud</td>
<td>Found that the differences are related to two general strategies: guessing the meaning of an unknown word and analysing the form of an unknown word</td>
</tr>
<tr>
<td>Gu(1994)</td>
<td>2 Chinese learners of English as a second language</td>
<td>Identification of vocabulary learning strategies used by two learners identified as good and poor learners</td>
<td>Think-aloud, interview</td>
<td>Found dramatic differences in strategy use at both the metacognitive and cognitive levels</td>
</tr>
<tr>
<td>Atherton (1995)</td>
<td>43 adult ESL learners studying at a British university</td>
<td>Identification of memorization strategies</td>
<td>Interview, questionnaire</td>
<td>Compiled a memorization strategy list consisting of 7 main types</td>
</tr>
<tr>
<td>Jones (1995)</td>
<td>Self-study experience of Hungarian</td>
<td>Identification of vocabulary learning strategies</td>
<td>Diary-keeping</td>
<td>Found transfer from study strategies to comprehensible-input strategies as his proficiency</td>
</tr>
<tr>
<td>Stoffer (1995)</td>
<td>707 English native speakers studying French, Spanish, Russian, German and Japanese as foreign languages</td>
<td>Identification of vocabulary learning strategies as related to individual difference variables</td>
<td>Questionnaire</td>
<td>Developed learning strategy inventory consists of 9 groups. Evidence for high correlation between strategy use and previous vocabulary learning strategies instruction</td>
</tr>
<tr>
<td>Hsia, Chung &amp; Wong (1995)</td>
<td>55 secondary school students of English from Hong Kong</td>
<td>Investigation of word-grouping strategies</td>
<td>Written reports, interview</td>
<td>Found most students organised words at the paradigmatic level according to their word class</td>
</tr>
<tr>
<td>Gu &amp; Johnson (1996)</td>
<td>850 Chinese learners of English as a foreign language</td>
<td>Discovering the relationship between vocabulary learning strategies and outcomes in learning English</td>
<td>Questionnaire</td>
<td>Identified a wide range of vocabulary learning strategies. Found that various strategies correlated positively or negatively with vocabulary size and general proficiency</td>
</tr>
<tr>
<td>Lawson &amp; Hogben (1996)</td>
<td>15 English native speakers learning Italian as a foreign language</td>
<td>Identification of the type and frequency of vocabulary learning strategies</td>
<td>Think-aloud</td>
<td>Identified 4 general strategies: repetition, word feature analysis, simple elaboration and complex elaboration.</td>
</tr>
<tr>
<td>Schmitt (1997a)</td>
<td>600 Japanese learners of English as a foreign language</td>
<td>Assessing vocabulary learning strategies learners actually use and how helpful they believe them to be</td>
<td>Questionnaire</td>
<td>Found some disparities between the most-used strategies and the most helpful ones</td>
</tr>
<tr>
<td>Al-Qarni (1997)</td>
<td>17 Saudi learners of English as a second language in the UK</td>
<td>Identification of vocabulary learning strategies</td>
<td>Questionnaire</td>
<td>Found participants used all different types of vocabulary learning strategies mentioned in the literature.</td>
</tr>
<tr>
<td>Erten (1998)</td>
<td>18 international students learning English at private schools in the UK</td>
<td>Identification of strategies used to commit words to memory</td>
<td>Self-observation procedure</td>
<td>Identified 24 strategies which were grouped into 6 different categories</td>
</tr>
<tr>
<td>Kojic-Sabo &amp; Lightbown (1999)</td>
<td>47 ESL students in Canada and 43 EFL students in Yugoslavia</td>
<td>Investigation of whether students can be grouped according to vocabulary learning strategies that dominates their approach</td>
<td>Questionnaire</td>
<td>Identified 7 different profiles of students approaches to vocabulary learning</td>
</tr>
</tbody>
</table>

Table 3.2 A summary of studies on vocabulary learning strategies
3.3.1 Henning's (1973) study
Henning (1973) conducted a study to investigate the way in which 75 learners (native speakers of English, foreign students learning English as a second language, native speakers of Farsi (Persian), and students of Farsi as a second language) at different levels of proficiency stored vocabulary in memory for retrieval purposes. Using a 60-item vocabulary-recognition test which was designed to measure the types and frequencies of recognition errors and a 50-item, 250-word cloze passage and an aural discrimination test to measure language proficiency, Henning found that second language learners encode vocabulary in short-term memory in clusters according to associations in meaning and sound, and that the low-level students stored vocabulary according to sound, whereas high-level students stored vocabulary according to meaning. This result is of great importance since it suggests that learners at different levels of proficiency may resort to different techniques for memorizing vocabulary items, and that strategies of encoding vocabulary in memory might change as a function of language proficiency. In the present study of vocabulary learning strategy use by AFL learners, proficiency level is one of the factors examined in relation to the use of vocabulary learning strategies through the survey (4.4.1.2).

In the light of these results, Henning suggested that teaching materials designed for low-proficiency language learners should point out similarities and differences of sound and spelling of words, and that vocabulary teaching to high-proficiency learners should focus on the meanings of words without attention to acoustic similarities.

The result of Henning's study was supported by Hastrup's (1989) observation that low level language learners used more holistic and pronunciation based word processing strategies when trying to infer word meanings in context, such as concentrating on similarities in pronunciation of the target word and an L1 word. On the other hand, higher level students tended to use more semantically driven analytical strategies, such as attempting to break the word into meaningful parts.

Clearly, Henning's study was largely concerned with how students commit new lexical items to memory. This aspect (committing vocabulary to memory) plays
an important role in vocabulary learning, and therefore has been a major area of investigation in the present study (4.2.4).

3.3.2 Papalia & Zampogna's (1977) interview study

Papalia and Zampogna (1977) asked 20 successful high school students (school-age) of Spanish and French in the US to read a passage in the foreign language and to think aloud in order to discover their strategies in deriving meaning from a written text. These students reported using the following strategies:

- Reading around words they did not know.
- Making use of all available information in the text to comprehend unfamiliar words.
- Guessing the meaning of unfamiliar words from the context.
- Skipping unimportant words.
- Looking for cognates
- Using a dictionary.

The authors then interviewed nine of the 20 students to find out what strategies they used for learning vocabulary. The strategies that students reported using included cooperative learning, concrete action words, flashcards, meaningful conversations, games, pictures, and repetition.

Papalia and Zampogna's study focused only on successful learners, an approach which has been used widely in earlier strategy research (Stern 1975; Naiman, Frohlich, Stern & Todesco 1978; Rubin 1975, 1981). In the present study, a slightly different approach has been adopted in which the vocabulary learning strategies of some successful and some less successful AFL learners have been identified and compared (4.3.1).

3.3.3 Cohen & Aphek's (1980, 1981) study

Cohen and Aphek conducted two studies in 1977 and 1978, published in 1980 and 1981. They focused primarily on the strategies students used in learning of vocabulary (Cohen & Aphek 1981) and the role of mnemonic associations in the retention of vocabulary over time (Cohen & Aphek 1980). In 1977, they conducted an investigation into different types of associations used by language learners to master new vocabulary. Seventeen native English-speaking students (9 beginners, 5 intermediate and 2 advanced) on a junior year abroad programme held in Israel were
involved in the study. The authors also investigated the impact of language proficiency on learning words from different types of tasks. Data were collected asking students to describe in writing the associations they used to learn words in seven vocabulary learning tasks which were spanned over 100 days. Tasks involved learning words from context, lists and some cloze procedures. Thirteen learners reported using the following eleven types of associations:

- Associating Hebrew words with English words with a similar sound.
- Associating part of a word with an English word by sound and meaning, and the other part with a Hebrew word by sound and meaning.
- Associating sound and meaning with an English phrase.
- Associating Hebrew words with other Hebrew words by sound.
- Associating Hebrew words with proper names.
- Associating Hebrew words with another language through meaning.
- Associating by structure.
- Associating by one or more letters.
- Associating with a frequently-seen sign.
- Associating with the place in the text where the word appeared.
- Associating by making a mental picture of the word.

As can be seen, some associations reported by the subjects rely on interlingual links between the L2 word and L1 word, and other associations rely on intralingual links between the new item and other items in L2. A third different type of association involves both types of links. All these types of association can facilitate committing new vocabulary to memory and hence the successful retention of words (cf. Laufer & Osimo 1991). Cohen and Aphek also observed that any attempt to form an association involving the target word aided retention, and that beginners benefited more from list learning than they did from contextualised learning whereas for intermediate learners contextualised vocabulary learning was more beneficial.

To investigate further the relationship between association and vocabulary, Cohen and Aphek (1980) conducted a 5-week longitudinal study in Jerusalem. Among the 26 native-English-speaking learners of Hebrew (23 males, 3 females and average age 23), 10 were advanced students, 8 upper intermediate, 7 lower intermediate, and 1 beginner. These learners were given a training session (10-15 minutes) on how to learn vocabulary through the aid of association. In the first week of the study, the learners were asked to make associations of their own choosing for the new words they selected from a reading passage in Hebrew. Every week, the learners were given
tests to find out how well they could retain the memory of the new words. They were asked to write down the associations they used while recalling the new words they learnt. Analysis of the data indicated that some students used the associations provided by the teachers, and some other students used their own associations. On the other hand, some of the subjects did not use any associations, trying simply to memorize the words. The two researchers also provided evidence that students who made associations retained words more successfully over time. This result seems to be in keeping with the results of Lawson and Hogben's (1996) and Erten's (1998) studies who found that mnemonic associations were among the most effective strategies. In subsequent sessions of learning new words, Cohen and Aphek found from students' self-reports that the non-mnemonic learning techniques were preferred to the mnemonic ones.

One issue needs to be discussed with regard to the methodology of Cohen and Aphek's study. The dependence on students' writing alone to identify their association strategies is subject to question. Cohen and Aphek acknowledge that it is not clear whether students were describing their associations accurately. This indicates, as Erten (1998) has suggested, the importance of checking the completeness of verbal reports by conducting follow-up interviews. Regarding this issue, a methodological decision has been taken in the present study of vocabulary learning strategy use by AFL learners: an interview has been conducted with each student participating in the 'multiple cases' at the time of collecting the students' diaries (5.5.1.2).

3.3.4 Ahmed's (1988) think-aloud study
In a major study of vocabulary learning strategies employed by learners of English as a foreign language, Ahmed (1988, 1989) obtained data on the learning strategies of 300 Sudanese students. Those students were from two age groups: school-age (intermediate and secondary schools students) and young adults (university level students). The main aim of this study was to identify the vocabulary learning strategies used by this group of Sudanese learners of English, and to discover if there were any differences between good and poor (underachieving) learners in strategy use. Subjects were assigned as good and poor learners by school officials, on the basis of subjective assessments and scholastic records. In addition, Ahmed sought to
investigate the relationship between strategy use and four factors: (1) the level of overall language achievement, (2) the use of English as a medium of instruction for other school or university subjects, (3) the number of years learning English, and (4) the level of vocabulary learning achievement.

By using three instruments: a think-aloud task, direct observation while students were thinking aloud, and an interview using a questionnaire, Ahmed was able to identify 5 macro strategies and 38 micro strategies. Macro-strategies were defined by Ahmed as general learning behaviours such as practice and dictionary use, whereas micro-strategies as specific examples for carrying out the former type such as making use of a newly learnt word by writing a letter for practice. The macro-strategies were:

- Information sources.
- Dictionary use.
- Memorization.
- Practice.
- Note-taking.

The results of the study indicated that at the macro-strategy level, there is little evidence for a distinction between good and poor learners. This result verified the hypothesis put forward in his study (the difference between good and poor learners can be found in the use of micro-strategies). Almost all Ahmed’s subjects used macro-strategies, and the major difference between learners was found in the choice of specific micro-strategies adopted within each macro-strategy. It was also found that three macro-strategies (using sources to find out about difficult words, memorization, and note-taking) seemed to be common to all the subjects. On the other hand, the results indicated that practice was the only macro-strategy that distinguished good learners from poor ones, thus confirming the research results of Bialystok (1981), and Huang and Naerssen (1987).

Bialystok (1981) carried out a research project examining the role of conscious strategies and their contribution to second language proficiency. It was found that functional practice helped to improve performance on all tasks undertaken by the subjects. Huang and Naerssen (1987) also conducted research in China into the role of functional strategies in the successful development of oral communicative
abilities. They also discovered that "students who were more successful in oral communication reported employing functional practice strategies more frequently than the less successful ones" (p. 290). In addition to practice, Ahmed also found that dictionary use strategies seemed to play a major role in distinguishing between good and poor students (see sub-sections 4.2.2 & 4.2.5 in Chapter Four).

Furthermore, Ahmed found that good learners used L2-based strategies more than L1-based strategies. L2-based strategies involved English in the activities which students performed. For example, students included synonyms and English paraphrase when taking notes about new words. However, poor learners relied heavily on L1-based strategies, such as asking about Arabic equivalents for new words. The result of the study also indicated that good learners seemed to move gradually from L1-based strategies to more L2-based strategies. Evidence provided by Kroll and Curley (1988) supports this conclusion. They suggest that in the initial stages of learning, new words are strongly linked to their L1 equivalents, and a shift to L2 occurs after some time.

In addition, Ahmed found that the choice of strategies seemed to be not only related to the simple dichotomy (good vs. poor) based on the level of achievement, but also related to all four factors included in the analysis. A statistical cluster analysis suggested five clusters of students, three of which were of good learners while the other two were of poor learners. Overall, the findings of Ahmed's research revealed that good learners not only used more vocabulary learning strategies but also relied more heavily on different strategies than did poor learners. The good learners also appeared to be more aware of what they can learn about new words, and aware of the importance of context in learning vocabulary. On the other hand, poor learners showed little awareness of what they can learn regarding new lexical items, and at the same time they did not display any interest in learning words in context. These results seem to be in line with the results of some other studies (e.g. Gu 1994, see sub-section 3.3.11). However, Ahmed did not attempt to differentiate between the vocabulary learning strategies which were employed in the class and those used outside classroom. The present study has investigated both in-class and out-of-class vocabulary learning strategies used by AFL learners (see section 4.5 in Chapter Four).
Ahmed's study is very important in terms of his covering of five aspects of vocabulary acquisition, which have also been investigated in the present study (4.2). However, Ahmed ignored metacognitive strategies, while many studies (see for example Gu's (1994) study below) suggest that one of the major differences between good and poor learners lies in their use of metacognitive strategies. The present study has, therefore, looked into AFL learners' use of metacognitive strategies as a major area of investigation (see sub-section 4.2.6 in Chapter Four).

3.3.5 Porte's (1988) interview study
In a study focusing only on adolescent (school-age) poor learners, Porte (1988) investigated the learning strategies used by 15 international learners of English as a foreign language in private language schools in London when dealing with new vocabulary. Using structured interviews, Porte found that his "poor" subjects (who were assigned according to test scores and their teachers' judgement) used strategies similar to those identified in studies of the "good language learner", including the use of repetition, the writing out of translation equivalents and the use of dictionaries to discover meaning. They differed in the way that they tended to "demonstrate less sophistication and a less suitable response to a particular activity" (p. 168). For example, they would refer to the dictionary without trying to infer the meaning. This would suggest that both groups of students (good and poor) should be taken into account when investigating the effective use of learning strategies, and this is what has been done in the present study (4.3.1).

The result of Porte's study corroborated, to some extent, Ahmed's (1989) findings in which the difference between good and poor learners can be found in the use of specific micro-strategies. In addition, the majority of Porte's subjects said that they used strategies, which were the same as, or similar to those strategies they had used at school in their home countries. This suggests that previous learning experience has a strong impact on strategy choice and use (see also Stoffer 1995 below).

3.3.6 Payne's (1988) questionnaire study
Payne (1988) did her master's dissertation on vocabulary learning strategies. She began her research by asking 17 ESL students, through interviews, what strategies they used to learn vocabulary. The results elicited from these interviews were used to
devise a 32-item vocabulary learning strategies questionnaire. In the present study, a similar procedure has been used to develop the Vocabulary Strategy Questionnaire, in which AFL learners' strategies, that were reported in the interviews and diaries during the pilot study, have been used to devise the Vocabulary Strategy Questionnaire (5.8.2). This 32-item vocabulary questionnaire, together with Reid's (1987) Perceptual Learning Style Preference questionnaire, were then administered by Payne to 103 university-level ESL students with different first languages. The aim of this study was to investigate the relationship between learning strategies and students' perceptual learning style preferences and to find out which vocabulary learning strategies are perceived as most effective by auditory and visual learners.

Payne's findings indicate a positive interaction between learning strategies and perceptual learning style preferences. Visual learners reported that they found strategies of 'learning words by reading books', 'writing words in the mind', and 'reading newspaper and magazines' more effective than did auditory learners. Effective strategies for auditory learners were 'asking native speakers for meaning of words' and 'studying words from advertisements'. Both visual and auditory students considered 'using flashcards' an effective strategy, although the visual learners perceived this strategy as being slightly more effective than did the auditory learners. This finding is in contrast with Erten's (1998) study which found no strong interaction between vocabulary learning strategies and learning styles.

Moreover, the findings of Payne's study reveal that beginner learners perceived all of the 32 vocabulary learning strategies included in the questionnaire as more effective than did advanced level students. This result is in line with Stoffer's (1995) study, but is not supported by some others (Al-Qarni 1997; Erten 1998). All students found practice extremely beneficial for learning new words, but using a dictionary was not felt to be effective. Finally, the results of this study also indicate that there were differences between Japanese and Spanish students in the perceived effectiveness of vocabulary learning strategies. However, students' perception of strategy usefulness may not always indicate the actual effectiveness of the strategies. The present study has, therefore, investigated strategy effectiveness by examining the strategies used by both the successful and less successful learners of Arabic.
3.3.7 Levine & Reves (1990) study
Levine and Reves (1990) presented 65 English words to 60 Israeli first year university EFL students, using visual and auditory aids. The purpose of the study was to investigate the effect of the method of presentation on vocabulary acquisition and the relationship of learner-factors and methods of vocabulary presentation in the retention of vocabulary. Information on the subjects’ vocabulary ‘processing’ strategies was obtained from two sources: a) a preliminary questionnaire which was meant to provide information on learner factors (personality variables, language background, word-processing habits and language attitudes) and b) the subjects’ authentic verbal protocols and learning sheets, in which the subjects were given time to study the 65 words and were instructed to simultaneously report in writing how they tried to remember them; these were supplemented by learning sheets on which students made notes while trying to remember the words.

‘Word-processing habits’ identified through the preliminary questionnaire were grouped into the following categories:

- Repeating orally.
- Writing down.
- Grouping into categories.
- Finding associations.
- Trying to remember the image of the word.
- Skipping the unknown word.

On the other hand, the information derived from the subjects’ verbal protocols and learning sheets was grouped into the following learning strategies:

- Translating the word.
- Finding familiar sounds (phonological association).
- Finding familiar elements in spelling and word form (orthographic and morphological association).
- Repeating orally and in writing.
- Grouping the words according to concepts (conceptual association).
- Changing the provided context.

To test short-term and long-term retention of the studied vocabulary, the subjects were given both immediate tests and delayed (three months after the last learning session) tests. The results indicate that the test scores on the long-term retention tests were much lower than those on the short-term retention tests, and the scores on the
tests using visual presentations of vocabulary were much higher than those using auditory presentations. Moreover, the relationships between test results and learning strategies were mostly derived from tests of auditory presentation. This led Levine and Reves to suggest that “when the learning task is hard, as in the learning of auditorily presented vocabulary, the strategies are activated to a greater extent” (p 43). In addition, the data of this study showed that students chose visual strategies even when the word was presented auditorily. This result is in keeping with that of Erten (1998), that the modality of vocabulary presentation has an effect on the use of learning strategies.

One of the greatest strengths of Levine and Reves' study is that they employed a multiple approach (a preliminary questionnaire, verbal protocols and learning sheets) in data collection which allowed them to identify many vocabulary learning strategies. In the present study also, combining data collection approaches have been adopted (see section 5.3 in Chapter Five).

3.3.8 Sanaoui's (1992) diary study

In one of the most important investigations of foreign students' behaviours concerning vocabulary learning, Sanaoui (1992, 1995) conducted a research study consisting of two phases. The initial phase investigated two questions: how do adult second language learners approach the task of vocabulary learning? And what mnemonic procedures do they use to help themselves retain the lexical items they were learning? These two questions were examined in an exploratory study with 50 beginner and advanced level ESL learners; 4 case studies of ESL learners; and 8 case studies of learners of French as a second language. In this phase, Sanaoui used diaries to collect data on vocabulary learning approaches, in which the subjects were asked to monitor and document daily the approaches they adopted for learning lexical items, and the subjects were also asked to discuss their approaches with the other participants. The participants were then interviewed based on what they recorded in their diaries. Those participants were from two age groups: young adults and adults.

The results of this phase of the research identified two distinctive approaches to L2 vocabulary learning: a structured approach and an unstructured approach. This result
may be an artifact of the methodology used, whereby participants were instructed to discuss their behaviours with each other, which might have led to their influencing each other. Consequently, while the present study has made use of diaries as one of the main data collection instruments, the participants have been dealt with individually (5.5.1.2).

The two approaches that were identified by Sanaoui differed in 5 aspects:

1. The extent to which learners engaged in independent study.
2. The range of self-initiated learning activities in which students engaged.
3. The extent to which learners recorded the vocabulary items they were learning.
4. The extent to which students reviewed such records.
5. The extent to which they practised using vocabulary items outside their language classes.

Although the five aspects above can be classified as out-of-class strategies, Sanaoui did not try to identify which of these strategies can be used inside the class. In the present study, both strategies used in class and those used outside class by AFL students in Saudi Arabia have been examined (4.5). In addition, it is not clear in Sanaoui’s study how other strategies such as dictionary use strategies and memorization strategies distinguished the two approaches.

In the view of the above findings, Sanaoui concluded that some adult students are clearly capable of independently and actively managing their own learning, and that others are much more in need of assistance in order to develop adequate learning strategies and increase their self awareness.

Regarding mnemonic procedures, Sanaoui’s subjects reported using the following techniques: writing the lexical items, immediate repetition, spaced repetition, using the word, contextual associations, linguistic associations, imagery associations, talking about the lexical item with someone, drawing a pictorial representation of the word, and acting out the word. These techniques appear to be consistent with what has been reported in vocabulary strategy research (e.g., Cohen & Aphek 1980, 1981; Ahmed 1989; Schmitt 1997a). The results of these studies provided the basis for developing a questionnaire on students’ approaches to vocabulary learning, which was used in the second phase of the study. In the present study, a similar
procedure has been employed, in which the results of four case studies conducted during the pilot study have provided the basis for developing the VSQ, the main instrument used in the survey part of the study (5.8).

The second phase of Sanaoui's research was conducted to answer three questions: to what extent does vocabulary learning by adult learners of French as a second language during lessons in French vary with: (1) the learners' level of proficiency in French, (2) the learners' approaches to vocabulary study, and (3) the methodology of classroom instruction they receive?

The results of the second phase indicated that vocabulary learning which was measured by a vocabulary achievement test was a good indicator of the influence of learners' approaches to vocabulary study. The group of learners taking a structured approach performed significantly higher on the vocabulary test than the group of learners taking an unstructured approach. On the basis of these findings, Sanaoui concluded that learners' approaches to vocabulary study were an important factor in predicting the outcome of their vocabulary learning. Furthermore, the learners' levels of proficiency and the type of instruction they had received did not affect their performance of learning vocabulary. Although these results are of great importance in revealing that the approach that a learner adopts for vocabulary learning may be a decisive factor in vocabulary learning success, and in providing additional evidence for the notion that vocabulary knowledge is an area which is strongly influenced by the personal actions students take sometimes regardless of situational factors such as teaching methods and textbooks used (see sub-section 1.3.3 in Chapter One), Sanaoui did not report what specific strategies had the strongest relationship with achievement. Moreover, the simple structured/unstructured categorisation might conceal a range of differences among learners (Kojic-Sabo & Lightbown 1999). Consequently, avoiding grouping students and dealing with each one as a separate case may capture these nuances in a more effective manner. The present study, therefore, has adopted a 'multiple cases' approach to investigate the relationship between vocabulary strategy use by AFL learners and success (4.3.1).
3.3.9 Lessard-Clouston's (1996) questionnaire study

Using Sanaoui’s categories (structured and unstructured), Lessard-Clouston (1996) conducted, using a questionnaire, a study of 14 adult ESL learners (from different first language backgrounds) studying in a TOEFL exam preparation class in Canada. The purpose of this research was to find out how these learners approached their vocabulary learning, how systematic they were about studying and reviewing vocabulary, and what strategies they used. Lessard-Clouston was also interested to discover whether a student’s approach to vocabulary learning could influence (and hence be used to predict) his/her performance on a vocabulary test, and also to explore the relationship between a learner’s approach and his/her overall results on a practice TOEFL test.

Unlike Sanaoui, Lessard-Clouston found that 3 out of the 14 subjects fell into the structured approach category, 4 students came under the category of unstructured approach, and half of the students (7 students) developed a different approach, that is, a semi-structured one which displayed “mostly structured characteristics, but did not meet one or other of the criteria” (p. 104). These three approaches differed in five aspects: self-initiated learning activities, time spent on such activities, vocabulary recording, reviewing, and practising. Another major difference between Lessard-Clouston’s study and Sanaoui’s is the finding that a structured learning approach was not an indication of either greater vocabulary success or a higher level of general proficiency in English among the students in his class. Lessard-Clouston discusses various possible reasons for these results, including the possibility that more advanced learners such as those in his TOEFL preparation class are better able to rely on incidental learning to expand their vocabulary without making as much deliberate effort to study new words. In addition, the difference in context between the two studies should also be kept in mind (Kojic-Sabo & Lightbown 1999). The students in Sanaoui’s study were learning French in British Columbia, where the language of the overwhelming majority of their daily activities was English. In contrast, the participants in Lessard-Clouston’s study were learning English in Ontario, where they had the opportunity to be immersed in the target language community outside the classroom. However, this would suggest that the evidence for the correlation between the use of particular vocabulary learning strategies and
achievement may need to be corroborated further. The present study has, thus, investigated this issue (see section 4.3 in Chapter Four).

3.3.10 Schouten-van Parreren’s (1992) think-aloud study
In restricting her research on vocabulary learning to reading, Schouten-van Parreren (1992) conducted an empirical study to explore the differences between strong and weak students in vocabulary learning and reading strategies. The proficiency level of subjects (weak or strong) was determined through subjective assessments by the teachers, though in some cases by means of a vocabulary test. She had 60 school-age Dutch students of very wide-ranging ability levels learning French as a foreign language in the Netherlands. The subjects were asked to work individually or in pairs on some vocabulary learning and reading tasks, and were requested to think aloud.

Schouten-van Parreren found that strong students showed far greater vocabulary knowledge than weak ones. She also found that the differences between these two groups of learners were related to two general strategies, namely, guessing the meaning of an unknown word from the context, and analysing the form of an unknown word, which can be classified as cognitive strategies (cf. O’Malley & Chamot 1990). Unlike strong students, the weak pupils generally experienced a lot of difficulties in guessing. They were unable to use the available clues to make correct guesses, they did not take into account the context in which the unknown word appeared, and they failed to establish any link between a new French word and their mother tongue equivalent.

Regarding word-form analysis, weak students, unlike the strong ones, showed a limited ability to recognise the relationships between French words and Dutch words, and they experienced difficulties in making an association between previously learnt words and the new words. This conclusion appears to be in line with that of Ahmed (1989: 9), who noted that poor students learn each new word “as if it had no relationship with any previously learned words”. In addition, weak students encountered difficulties in memorizing the meaning of new words. Schouten-van Parreren, thus, concluded that weak pupils should be helped to “master relevant vocabulary learning and reading strategies” (p. 94)
Obviously, Schouten-van Parreren was concerned more with the vocabulary learning that occurs during reading, and this provides us with only a limited assessment of students’ strategies for vocabulary learning. For example, this study did not reveal any behaviours related to dictionary use or practice, two aspects that have been seen to play major roles in vocabulary learning and in distinguishing between successful and less successful learners (see Ahmed 1989 above and sub-sections 4.2.2 & 4.2.5 in Chapter Four). The present study of vocabulary learning strategies of AFL learners is intended to investigate vocabulary learning strategies in general, without restricting vocabulary learning in relation to one skill only.

3.3.11 Gu’s (1994) think-aloud study

In a similar approach to that of Schouten-van Parreren, restricting vocabulary learning to reading, Gu (1994) conducted a study in China to explore and describe the strategies and processes of vocabulary learning employed by two young adult Chinese learners (good and poor) of English as a second language. In so doing, three stages were examined:

(1) How a new vocabulary item was handled during the first encounter;
(2) How it was looked up in the dictionary; and
(3) How it was reinforced afterwards.

The proficiency levels of the two learners was determined according to their English achievement as measured by the national College English Test used in China. Gu obtained from both subjects “think-aloud” protocols during and after reading, and conducted immediate retrospective interviews after each task based on his field notes. Gu found major differences between the good learner and the poor one at both the metacognitive and the cognitive levels.

At the metacognitive level, the good student was aware of the function of intensive reading as a process of learning and information decoding. He evaluated the familiarity of every lexical item and determined the level at which the item needed to be processed (whether abandoned, guessed, checked in the dictionary, or reinforced). He also monitored the pace and scope of learning carefully, and was aware of every step he took. On the other hand, the poor learner did not have a clear idea of the purpose of the intensive reading. She also applied very little self-monitoring and
seemed unable to evaluate her own learning appropriately. The importance of metacognitive strategies has been recognised by academics in the field (4.2.6).

At the cognitive level, Gu found that the good learner was highly selective when choosing which words to abandon, guess, or check and so on. On the contrary, the poor learner looked up almost every word she found problematic. Regarding guessing, the good subject tried to use a range of clues to make correct guesses, whereas the poor subject made no successful attempt at guessing. This result endorses Schouten-van Parreren’s (1992) findings. When a particular word was being looked up, Gu also noticed that the good student tried to find an appropriate dictionary meaning according to the context, whereas the poor learner tried to find a general meaning and then imposed it on the context. This finding confirms Ahmed’s (1989) conclusion that the appropriate use of dictionaries is one of the significant characteristics of the good learner. In addition, and contrary to the good learner, the poor learner did not carry out any reinforcement.

The major difference between Schouten-van Parreren’s results and Gu’s findings is that the former found differences between strong and weak students at only the cognitive level, whereas the latter found differences between his subjects at two levels: cognitive and metacognitive. However, the differences in the ages of the subjects of the two studies should not be ignored. In the present study of vocabulary learning strategies used by AFL learners, both aspects (cognitive and metacognitive) have been investigated, although the term cognitive has not been used (see section 4.2 in Chapter Four, for more details about the vocabulary learning strategy classification adopted in this study).

3.3.12 Atherton’s (1995) interview study
Atherton (1995) undertook an investigation to identify memorization strategies for vocabulary learning employed by 43 adult ESL learners studying at a British university. Drawing upon the literature (mainly from Oxford’s (1990) strategy classification system, see sub-section 3.4.1.3), she compiled a memorization strategy list to serve as a basis for her strategy identification. Examining the group interviews, she found evidence regarding some of the strategies listed in her inventory, which she grouped into 7 main types:
• Selecting attention.
• Creating mental linkage (grouping/visualisation).
• Association (sound, image, sensual/emotional, context, humorous).
• Mnemonic technique (similar to keyword method).
• Practice (through communication/media, reading/writing).
• Rote memorization.
• Dictionary use.

The results of the study indicate that Asian students relied on practice through writing rather than through oral communication, which was a practice strategy for vocabulary learning more commonly found among the European students. Rote memorization strategies were found to be used only among the Asian learners, thus confirming the prototypical profile of Asian learners (Politzer & McGroary 1985). The overall findings from the questionnaire and interviews revealed that paying attention to context and memorizing by sound association were the two strategies most frequently used by the subjects of this study. In addition, it seems that the language learning environment proved to be an important factor affecting the choice of learning strategies of ESL students, since there was a strong preference towards communication-based strategies while in a native-speaking environment. This supports the suggestion of the present study that the learning environment may have an impact on the use of learning strategies (1.3.5). As a result, AFL learners might display different patterns of vocabulary strategy use from what is reported in the vocabulary strategy research, since there are major differences between the TAFL context in Saudi Arabia and other contexts (2.2.1).

Based on her findings, Atherton suggested that most of her subjects had a very high level of metacognitive awareness, and she reported that the majority of them indicated clearly that they regarded training in memorization strategies as both desirable and helpful.

3.3.13 Jones’ (1995) diary study
Jones (1995) reported his self-study experience of Hungarian with reference to vocabulary, analysing his own process of learning the language over 11 months. He kept diaries of his study sessions, which lasted for about 30 minutes a day, six times a week. His proficiency level at the beginning of the study was elementary, and by the end of the study he estimated his proficiency as intermediate. Jones noticed that
his Hungarian proficiency level determined his choice of vocabulary learning strategies. In the early stages of his language development he mostly used 'studial' strategies, such as constructing an individual dictionary for memorizing words and recording their translations. After he had attained a certain level of language proficiency, a radical change in his repertoire of strategies took place: he switched from studial strategies to what he calls comprehensible-input strategies. In this stage, Jones was able to cope with real texts. After this stage, however, Jones noticed that he did not progress any further. He then complemented his reading with studial strategies. The findings of this study confirmed observations in the literature that language proficiency affects strategy choice and use (e.g. Ahmed 1988; Stoffer 1995), and confirmed the view that contextualised vocabulary learning may be particularly useful for higher-level proficiency students (Cohen & Aphek 1981). However, Jones' linguistic background as an applied linguist and its effect on his use of strategies should be taken into account.

One of the most important features of Jones' study, in addition to its longitudinal design, is the using of learning diaries as the major data collection instrument. The present study has also made use of diary-keeping as one of the main research methods employed to gather data about vocabulary learning strategies used by AFL learners.

3.3.14 Stoffer's (1995) questionnaire study
Stoffer (1995) conducted a large-scale study involving 707 students from different age groups (young adults and adults) enrolled in French, German, Japanese, Russian, and Spanish classes in the USA. The purpose of this research was to assess foreign language learners' use of vocabulary learning strategies in relation to individual difference variables, i.e., previous language learning experience, course level, language studied, previous instruction in vocabulary learning strategies, age, and gender.

As a result of her pilot and main studies (using questionnaires), Stoffer was able to develop a vocabulary learning strategy inventory. This inventory consisted of 9 factors (groups):

(1) Strategies involving authentic language use.
(2) Strategies involving creative activities.
(3) Strategies used for self-motivation.
(4) Strategies used to create mental linkages.
(5) Memory strategies.
(6) Visual/auditory strategies.
(7) Strategies involving physical action.
(8) Strategies used to overcome anxiety.
(9) Strategies used to organise words.

This inventory was developed based on one of the most well-known classification systems of learning strategies, that is the Strategy Inventory for Language Learning or SILL (Oxford 1990, see sub-section 3.4.1.3 in this chapter for more details about Oxford’s classification).

Furthermore, the results of Stoffer’s study showed that the most important factor influencing strategy use was previous instruction in how to use vocabulary learning strategies. The foreign language studied also proved to have a bearing on the use of vocabulary learning strategies. The greatest use of strategy was reported by students of the more difficult languages (difficult for native speakers of English): Japanese and Russian. Learners of Spanish, French, and German displayed almost the same patterns of strategy use. While learners of French, German and Spanish shared creating mental linkages, such as sound association and learning related topics together, as their most frequently used set of strategies, learners of Russian reported using memory strategies, such as oral repetition and using flashcards, most frequently. The most frequently used strategies for Japanese learners were self-motivation strategies such as self-testing and trying to relax when using a word. This result verifies the suggestion emphasized in the present study that the language being learnt and its distance from the L1 may have an impact on strategy use (1.3.6). Thus, AFL learners might employ different patterns of strategies from those reported by Stoffer’s subjects or those reported by other subjects who participated in the research studies reviewed in this chapter.

Other results from Stoffer’s study revealed that previous language learning experience also had an impact on the use of vocabulary learning strategies, “more experienced foreign language learners did indeed use vocabulary learning strategies significantly more frequently than less experienced learners” (p. 150). Moreover,
Stoffer found that age and gender affected (though not significantly) strategy use: older learners used slightly more strategies than younger learners, and females more than males. The observation that females usually use more strategies than males has been repeatedly made in a number of studies of language learning strategies (Ehrman & Oxford 1989; Green & Oxford 1995). The course level also had a bearing on strategy use, but, unexpectedly, absolute beginners showed the highest degree of strategy use. This result is in contrast with the findings of some studies (Cohen & Aphek 1981; Al-Qarni 1997; Erten 1998) that advanced students use more strategies than beginners, but is in keeping with the result of Payne's (1988) study (3.3.6). Stoffer attributed this finding to the lack of experience of beginner learners. She claimed that beginners tend to use all of the strategies or think they are all effective because they have not tried them. However, this factor (proficiency level) has been examined in the present study as one of the individual factors included in the survey (4.4.1.2).

3.3.15 Hsia, Chung & Wong's (1995) study

Hsia, Chung and Wong (1995) investigated the word-grouping behaviour of 55 secondary school students (28 males, 27 females; age 14-15) of English from Hong Kong. The procedure used to identify students' word grouping strategies was as follows: the authors showed the subjects on an individual basis a word list of 50 words, in which the words appeared in jumbled order, and then they asked each subject to sort words out in any way they would prefer, writing their groupings on a paper. Finally, the subjects were asked why such groups were formed for the words.

The results of the study showed that most students organised words at the paradigmatic level, according to their word class. Some learners also organised words according to semantic-syntactic relations, so, some of the lexical groups formed in this category were collocation sets, in concrete objects and more indicative of mapping of semantic features in a syntagmatic order. Few learners were found to group words on the basis of visual similarities in spite of difference in word class. The results of the study also demonstrated a general lack of shared categories among the subjects and that knowing more words seems not to lead to make more word categories. In the present study, word-grouping strategies of AFL learners have
been examined when exploring their note-taking strategies (4.2.3) and also their memorization strategies (4.2.4).

3.3.16 Gu & Johnson's (1996) questionnaire study
In a comprehensive study involving 850 university students, Gu and Johnson (1996) undertook a research project with the aim of establishing the vocabulary learning strategies used by Chinese university learners (young adults) of English and the relationship between their strategies and outcomes in learning English. Using a questionnaire to elicit students' beliefs about vocabulary learning and their self-reported vocabulary learning strategies as well as two tests- one to measure vocabulary size and the other to measure general proficiency in English- Gu and Johnson intended to answer the following questions: “do any strategies work better or worse than others? Do all strategies good for vocabulary retention automatically benefit the development of general L2 proficiency? Do learners stick to certain types of strategies and adopt distinctive approaches to vocabulary learning? If so, how does that influence outcomes? Above all, among a whole range of vocabulary strategies..., which do EFL learners tend to employ?” (p. 647).

The questionnaire included 91 vocabulary learning strategies identified from the literature. The strategies were grouped as strategies for metacognitive regulation, guessing, dictionary use, note taking, rehearsal, encoding and activation. The results of the study showed that Chinese students mostly believed that vocabulary should be carefully studied and used. Context was believed to be more important than pure memorization of the words.

Moreover, it was found that students employed a wide range of vocabulary learning strategies. The most common strategies used were metacognitive regulation, guessing, dictionary work, and note taking. These students also reported making little use of rote memorization techniques as well as mnemonic devices and semantically based strategies, which are favoured by some researchers (see Thompson 1987 for a review of mnemonic techniques, and Tinkham 1993 for a discussion of semantic clustering in vocabulary learning). This last result is very important because it tells us that students on many occasions may behave in different ways from those which language teachers and researchers anticipate or suppose. Furthermore, this finding
supports the suggestion of the present study (see 1.3.5) that different types of behaviours are expected to be found in different contexts and with different subjects, and that research findings obtained in some Western countries should not be taken for granted across the board and should not be generalised to cover other environments such as the TAFL context. In addition, these findings did not confirm the prototypical profile of Asian learners as using rote memorization more frequently than other strategies (Politzer & McGroary 1985; Atherton 1995). More important, the results indicated that learners seldom used one single strategy, and their choice of strategy combinations, rather than individual strategies, resulted in learning differences. This result is in keeping with findings of some other studies (Lawson & Hogben 1996; Erten 1998). However, Gu and Johnson did not report the patterns of strategy combination and did not also specify which combinations are more effective. The present study has, therefore, taken into consideration strategy combination when analysing the data (5.6.5) and when reporting the findings (6.4).

The results of the correlation analysis in the study of Gu and Johnson revealed that different strategies correlated positively or negatively with the two tests. The two metacognitive strategies (self-initiation and selective attention) correlated positively with the two tests. This result confirms the importance of metacognitive strategies in vocabulary learning success (see Gu 1994 above). Contextual guessing, contextual encoding, oral repetition, and note-taking also correlated positively with the two tests. Moreover, Gu and Johnson found that retention strategies (mnemonic devices, semantic encoding strategies, and word lists) correlated more with the vocabulary size test than with the English proficiency test, which suggests that these strategies may be more lexically-based strategies. On the other hand, visual repetition correlated negatively with both vocabulary size and language proficiency. In addition, believing in memorization was negatively correlated with both measures.

Gu and Johnson next performed multiple regression analyses to get a better picture of the relationship between the independent and dependent variables when considering all independent variables simultaneously. The multiple regression analyses revealed that metacognitive regulation strategies were found to be the best predictors of language proficiency, followed by contextual encoding and oral repetition, whereas
visual repetition, imagery mnemonics, and believing in memorization were negative predictors of overall proficiency. Regarding vocabulary size, self-initiation, looking up in dictionaries, extra-curricular time spent on English, intentional activation of new words, and semantic encoding were positive factors, while visual repetition and imagery encoding were strong negative predictors. However, one of the major limitations of this study is that the authors present frequency of strategy use only for groups of strategies rather than individual strategies within each group, and it has been suggested (Ahmed 1989) that looking at individual strategies is more useful and revealing in classifying language learners according to their language achievement. As a result, the present study has focused on both aspects: strategy groups and individual strategies (see sub-sections 4.3.1 in Chapter Four and 5.8.1 in Chapter Five).

Finally, Gu and Johnson conducted a cluster analysis to classify learners according to their strategy profiles and learning outcomes, and they identified 5 approaches to learning. The first group were the "readers" who believed that vocabulary should be picked up through natural exposure. The second group were the "active strategy users" who employed almost every strategy and were characterized by their self-initiation and their flexibility in strategy use. The third group were the "passive strategy users" who believed in memorization and in the active studying of new words. The last two groups were the "encoders" and "non-encoders" who were almost indistinguishable from each other except for their use of encoding strategies. Gu and Johnson found that the most successful learners were the readers, followed by active strategy users, non-encoders, encoders, and passive strategy users. This suggests, as Gu and Johnson pointed out, that both direct and indirect approaches to vocabulary learning could be useful.

3.3.17 Lawson & Hogben's (1996) think-aloud study
Using a think-aloud procedure, Lawson and Hogben (1996) investigated the behaviour of 15 female university students (young adults) in Australia learning Italian as a foreign language. They were interested in: (1) investigating the types and frequency of strategies used by experienced learners when asked to undertake a deliberate vocabulary acquisition task; (2) establishing the relationships between particular vocabulary learning strategies and the number of words recalled at the end
of a word learning session; and (3) finding out to what extent subjects try to guess word meaning from context before resorting to translation. Students were given training on the think-aloud procedure followed by some practice on a neutral task. Each student studied a list of 12 words. Retention of the words was checked by administering an immediate post-test.

Lawson and Hogben's analysis of the protocols identified fifteen strategies. They grouped these strategies in 4 higher-level categories. These were repetition strategies, word feature analysis, simple elaboration and complex elaboration. Lawson and Hogben found that repetition was the most frequently used strategy by most of the students, followed by simple elaboration strategies, complex elaboration strategies and strategies for word feature analysis. More specifically, students relied on frequent use of dictionaries, translation, and the form and sound of the word as bases for generating meaning. On the other hand, the researchers found that subjects did not make a great use of context, and that few students used any mnemonic strategies. Data analysis also indicated that students tended to use more than one strategy when learning a new word and its meaning. The authors explain this by reference to the experience their subjects had in learning Italian.

According to the correlational analysis, Lawson and Hogben found that both repetition and elaborative strategies (simple and complex) were associated with better recall. Furthermore, the paraphrase and deliberate mnemonic strategies, though infrequently used, were found to be associated with success in recall. However, there was a lack of association between use of context and recall of meaning. This last result is in contrast with that of Gu and Johnson (1996), who found that the use of context correlated positively with the two tests used in their study. Generally speaking, there was a strong positive correlation between students' overall frequency of strategy use and their recall test scores, which suggests a strong relationship between vocabulary strategy use and success in vocabulary learning. Therefore, the first aim of the present study is to investigate this relationship in detail (4.3).

According to the results of the word meaning recall test, Lawson and Hogben divided the subjects into two groups: the high-scoring group and the low-scoring group. They found that the students in the high group not only used many more
strategies on average, but they also used these strategies much more frequently and consistently. This conclusion seems to be in line with that of Ahmed (1989), who noted that good learners used more strategies, and tended to be more consistent in their strategy use than poor learners. This led Lawson and Hogben to suggest that “one element of success in learning foreign language vocabulary is the consistent and skillful use of individually congenial strategies rather than the employment of some particular fixed set of strategies” (p. 127).

3.3.18 Schmitt’s (1997a) questionnaire study
Schmitt (1997a) has made a very influential contribution to the field of vocabulary learning strategies by providing the first comprehensive taxonomy of “lexically-focused strategies”. He classified vocabulary learning strategies into two main categories: Discovery strategies and Consolidation strategies (see sub-section 3.4.2.3 in this chapter for more details about Schmitt’s taxonomy). Using an early version of his strategy taxonomy (Schmitt & Schmitt 1993), Schmitt conducted a survey of 600 Japanese EFL students from different age groups (school-age, young adults and adults). The study was conducted to explore changes in the use and perceived effectiveness of strategies with relation to age and educational level of the subjects, in which students were asked to respond to the questionnaire items as to how frequently they used a given strategy and how effective they thought the strategy was or would be.

The results indicated that the most-used discovery strategies were bilingual dictionary use, guessing from textual context, and asking classmates for meaning. Regarding “consolidation” strategies, the most-used ones were verbal repetition, written repetition, studying the spelling, saying the new word aloud, taking notes in class, studying the sound of a word, and making word lists. On the other hand, checking for an L1 cognate, using physical action, using cognates in study, using semantic maps, teacher checks and flash cards for accuracy were the least-used strategies.

The results also showed that Japanese learners reported use of a bilingual dictionary, saying new words aloud when studying and written repetition as the most useful three strategies. When the most-used strategies were compared to the most helpful
ones, Schmitt found some disparities which suggest that learners can find “value in strategies which they do not currently use” (p. 221). As mentioned previously (3.3.6), asking students how useful or effective they consider learning strategies to be may not always indicate the actual effectiveness of the strategies. In the present study, the notion of comparing the vocabulary strategy use of good and poor learners has been chosen to investigate the effective use of strategies (4.3.1).

Schmitt also found that the patterns of students’ strategy use and their perceived effectiveness can change over time as the learner either matures or becomes more proficient in the target language. Regarding changes in strategy use, Schmitt noticed that younger learners reported using mechanical repetition strategies (i.e. written repetition, word lists and flash cards) more than adults, while older learners of English reported using analytical strategies (i.e. guessing from textual context, imagining word’s meaning and analysing part of speech) more frequently than younger learners. As for changes in the perceived effectiveness of some strategies, Schmitt found that strategies such as learning from word lists and using flash cards were perceived as less useful by older learners, while the perceived effectiveness of some deeper word processing strategies increased. This result confirmed other findings in the literature that proficiency level and age have some effect on strategy use (e.g., Ahmed 1989; Oxford 1989; Stoffer 1995).

3.3.19 Al-Qarni’s (1997) questionnaire study

Al-Qarni did his master’s dissertation on vocabulary learning strategies. He conducted a small-scale exploratory study in which a questionnaire was administered to 17 Saudi learners of English as a second language in the UK. The findings of the study showed that participants used all of the different vocabulary learning strategies mentioned in the literature, including repetition, note-taking, association and deliberate language use strategies, but to different degrees.

In addition, deliberate language use strategies which involved watching TV, listening to radio, reading newspapers etc. were found to be the most used strategies by all participants, followed by repetition and finally association strategies. This indicates the importance of students’ efforts to learn new vocabulary items outside class, and
therefore, expanding lexical knowledge has been one of the major areas of examination in the present study (4.2.7).

The results also indicated that learners' level of proficiency affected the choice and frequency of strategies used. It was found that advanced learners employed more varieties of strategies than other learners and used them more frequently, thus confirming the results of some other studies (e.g. Erten 1998), but in contrast with Stoffer's (1995) and Payne's (1988) findings. Moreover, learners' expected field of study influenced their decisions to learn words, that is, greater attention was paid to vocabulary related to learners' expected field of study. Time spent in the UK is also found to affect learners' choice and frequency of vocabulary learning strategies. This led Al-Qarni to suggest that moving to a new learning environment and to different teaching methods have an effect on strategy use.

3.3.20 Erten's (1998) study
The researcher investigated vocabulary learning strategies used by 18 international adult students learning English at private schools in England. The study aimed to explore what strategies were used by these students to commit words to and retain them in memory. The study also examined the effects of modality of presentation (e.g. oral presentation and written presentation) and students' preferences for different perceptual learning styles on the use of vocabulary learning strategies. The data were collected by a self-observation procedure whereby students reported what they did to learn words in two individually conducted vocabulary learning tasks. To examine vocabulary retention in order to examine the effectiveness of the strategies, one pre- and two post-tests (immediate and a week later) were given to the subjects.

The results of the study indicated that students used a total of 24 different types of strategies which were grouped by Erten into 6 different categories:

- **Metacognition**: 1) Assess word difficulty. 2) Make notes.
- **Strategies for elaborating word definition**: 3) Modify word definition. 4) shorten word definition.
- **Rehearsal strategies**: 5) Repetition. 6) Recapping words.
• **Strategies for analysing linguistic features:** 7) Attend to the part of speech. 8) Attend to affixes that word includes. 9) Attend to different parts of the word. 10) Associate word to an L1 or L2 cognate. 11) Associate word with a synonym or antonym.

• **Mnemonic associations:** 12) Keyword technique. 13) Create personal interaction with the word. 14) Create sound association with L1/L2/L3 word. 15) Create a mental picture of word meaning. 16) Associate word with example sentence. 17) Associate word to an image. 18) Create a physical or affective sense of the word. 19) Look for a distinct feature of the word. 20) Associate word to its spelling. 21) Associate word to its location. 22) Associate word to the learning situation.

• **Strategies for using words:** 23) Use word in a new sentence. 24) Replace word with its short definition in example sentence.

The results of the study showed that students did not subscribe to only one type of strategy; rather they used several of them together, thus confirming the results of other studies reviewed in this chapter (Lawson & Hogben 1996; Gu & Johnson 1996) that students usually use strategies in combination. Consequently and as mentioned previously, this aspect of strategy use (strategy combination) has been taken into consideration in the present study.

The most frequently used strategies by Erten's subjects were modifying definition of the word, creating a sound association between the target word and another word, and repetition. It was also found that the modality of vocabulary presentation and self perceived English proficiency had an effect on the use of strategies. The students used modifying word definitions, replacing a word with its short definition in an example sentence, and repetition more frequently in the written tasks, while they created mental picture of words and made notes more frequently in the oral task. This result confirmed the findings of Levine and Reves (1990) that the method of vocabulary presentation has an impact on vocabulary strategy use.

Further, while the advanced students attended to affixes, and used the keyword technique more frequently, looking for a distinct feature of the words was used more
frequently by the intermediate students. Erten concluded that the advanced learners used their superior linguistic knowledge in using more analytic strategies than the intermediate students. This result seems to be in line with some findings in the literature (e.g. Cohen & Aphek 1980).

As regard the effect of perceptual learning styles on the use of vocabulary learning strategies, although there were some strong correlation coefficients, the researcher was not able to draw a complete profile of the interactions between them. Consequently, Erten suggested that the relationship between the perceptual learning styles and the use of strategies is probably more complicated than is assumed. This finding appears to be in contrast with that of Payne (1988) who found a strong relationship between vocabulary strategy use and learning styles.

With respect to the effectiveness of the strategies, Erten found that the keyword technique, associating word to its spelling, creating personal interaction with the word, attending to affixes, attending to parts of the word, and recapping words were the more effective strategies. Therefore, the researcher concluded that vocabulary acquisition can be facilitated by the use of strategies that involve deeper semantic and cognitive processing and that involve enhancing the bonds in the mental lexicon. It was also emphasized that greater personal engagement with the words can add to the quality of vocabulary learning.

3.3.21 Kojic-Sabo & Lightbown’s (1999) questionnaire study
In this study, students’ approaches to vocabulary learning were surveyed in two distinct learning environments: one where English was studied as a second language (ESL), and another where it was a foreign language (EFL). The participants were 47 ESL undergraduate students at Concordia University, and 43 EFL students enrolled in the final year of preuniversity schooling in Yugoslavia. The study was carried out to investigate whether students’ vocabulary learning strategies differ in any significant ways in the different learning environments (ESL vs. EFL). In addition, it was aimed to see if students can be grouped according to the vocabulary learning strategy or set of strategies that dominates their approach, and also to examine whether the strategic approach that students adopt relates to their performance on a
test of vocabulary size and to their overall English proficiency as measured by a cloze test.

The main instrument used in this study was a questionnaire adapted from Sanaoui's (1992) study for surveying students' approaches to vocabulary learning. The students were asked to indicate, among other things, the amount of time they usually spent on vocabulary learning, the extent to which they engaged in independent language study, the type of vocabulary learning activities they did on a regular basis, the frequency and elaborateness of their note-taking and reviewing efforts, and the frequency and elaborateness with which they used dictionaries. Thus, the five criterion variables that were expected to distinguish among various learner types in terms of their approach to vocabulary study were: (a) time, (b) learner independence, (c) vocabulary notes, (d) review, and (e) dictionary use.

The findings of the study showed that students in the two settings did exhibit some differences with regard to what strategies they used and to what extent. In the case of learner independence and the strategy of reviewing, the differences were statistically significant: the ESL group scored higher in independence and the EFL group scored higher in reviewing. There were also some small, non-significant differences, in the amount of time students in the two groups spent on learning English outside the classroom and on the use of dictionaries. In contrast to their differences in these strategies, the groups were strikingly similar in their note-taking efforts.

The result of cluster analysis identified 7 different profiles of student approaches to lexical learning:

- Cluster 1 reported high scores on time, independence, and dictionary use, and low scores on review.
- Cluster 2 reported high scores on independence, and low scores on time and review.
- Cluster 3 reported high scores on independence and review, and low scores on time.
- Cluster 4 reported very little strategy use overall: low scores on review, and below-average scores on all other measures.
- Cluster 5 reported very little strategy use overall: high scores on review, and low scores on time, independence, and dictionary use.
- Cluster 6 reported high scores on all five strategies.
Cluster 7 reported high scores on time, note-taking, review, and dictionary use, and low scores on independence.

Analyses were also conducted to determine a possible relationship between strategy use and achievement level. Students' performance on two tests, a Yes/No test assessing knowledge of academic vocabulary and a cloze test assessing overall English proficiency, were compared for the clusters. Of the seven clusters, two (clusters 1 & 6) clearly comprised students with high achievement level, whereas two other clusters (4 & 5) brought together learners with significant lower scores on the two measures. Learners in the remaining three clusters fell between the high and low scores on their Yes/No and cloze test performance.

When looking at the two clusters that contain high achievers, it was found that cluster 1 exhibited one major difference from that of cluster 6 on the variable of review. Cluster 1 students did not report making use of this strategy. On the other hand, examining the two clusters that contain low achievers suggests that nonuse of the strategies of time, independence, and dictionary use, with or without the use of review, is linked to fairly poor achievement level overall. Finally, the findings of this study suggest a strong relationship between the amount of strategy use and levels of success in language learning, thus confirming the results of other studies (e.g. Lawson & Hogben 1996).

The results of the study indicated that independence and time are the most crucial strategies. The present study has, therefore, focused on students' independence as a major area of investigation when examining students' strategies to expand their lexical knowledge (2.4.7).

Summary & Implications
In the following paragraphs, some points that have been highlighted in the discussion above and their implications for the present study will be discussed:

Vocabulary strategy research

- Although language learning strategies have been a notable area of research in recent years, relatively little research has been done to assess the specific use of vocabulary learning strategies, especially when compared to what has...
been written on the Keyword Method (see Cohen 1987 and Pressley et al. 1982), and on the inferring of word meanings from context (see Clark & Nation 1980 and Liu & Nation 1985).

- The studies of vocabulary strategy identification can be divided into two major groups. The first group (Henning’s, Cohen & Aphek’s, Hsia, Chung & Wong’s, Atherton’s and Erten’s studies) investigated students’ strategies in relation to one particular aspect of vocabulary learning (e.g., association techniques, word-grouping). The second group examined learners’ strategies according to several aspects of vocabulary learning. The present study can be categorised with the second group since it will attempt to assess the use of vocabulary learning strategies by AFL learners regarding a number of aspects of learning Arabic vocabulary.

Language of study

- Most of the studies that have been conducted to identify vocabulary learning strategies have been applied to English. Other languages that have been subject to study include French, Spanish, Russian, German, Japanese, Italian, Hungarian, Farsi and Hebrew. No published study has been done with Arabic.

- Most of the languages in the above list are Indo-European languages. Little is known about the vocabulary learning strategies that may be employed when learning a language from a different family group such as Arabic which is a Semitic language (Hebrew is also a Semitic language).

- Dealing with a different morphological and semantic systems, and using a different script from those mentioned above (only Farsi from the above languages has a similar script to Arabic) may have some effect on the types of strategy that are to be employed. In addition, some features specific to Arabic (e.g., diglossia, script without written short vowels) or/and features not in students’ first languages might lead to learners developing specialised strategies.

The participants

- Some studies reviewed in this section involved students with the same first language background (e.g. Ahmed, AlQarni), and others (e.g. Henning, Porte, Sanaoui, Erten) included subjects with different first languages. The present study involved learners from various first language backgrounds. This factor (mother tongue) is one of the variables that has been examined in this study. Subjects were divided into two groups according to how similar or different is the script of their languages to Arabic script (4.4.1.1). This has been done only in the survey.

- The studies can be divided into two general groups according to the age of the participants. The first group includes studies that have been applied to students from one age group (e.g., Papalia & Zampogna, Shouten-van Parreren). The second group consists of studies that have been conducted
with students from different age groups (e.g., Ahmed, Sanaoui, Schmitt). The present study can be classified in the second group since it involved learners from different age groups.

- The subjects who participated in the above studies can be divided into three groups according to their ages: school-age students, young adults and older adults. The present study included students from all three groups. As such, learners’ behaviours identified within the three groups are relevant to the context of the present study.

**Vocabulary strategy use and success**

- The relationship between the use of certain vocabulary learning strategies and success in language learning has been explored in one of two ways: by examining and comparing the vocabulary learning strategies used by the good and the poor learners, or by correlating the use of certain strategies with achievement scores. Yet another group of studies try to infer strategy effectiveness from learners’ perception of effectiveness (Payne, Schmitt).

- It has been noted that although several studies have attempted to explore this relationship, the evidence obtained is still not very conclusive, and the relationship needs to be explored more systematically, and this has been done in the present study (see section 4.3).

**‘Good’ and ‘poor’ learners**

- Some studies reviewed in this section have investigated the vocabulary learning strategies used by ‘good’ learners and compared them with those used by ‘poor’ learners. A similar procedure has been done in the present study. But, a more detailed and systematic comparison has been carried out (4.3.1).

- The results of these studies indicated that the ‘good’ learners used more strategies and used them more frequently than ‘poor’ learners. Good learners also tended to be more consistent in their strategy use. In addition, good learners, unlike poor ones, appeared to be more aware of what they can learn about new words and aware of the importance of context in learning vocabulary. Good students also seemed to plan, monitor, and evaluate their learning more systematically than poor students. Finally, practising newly learnt words appears to play a major role in differentiating between the two groups of learners.

- The criteria that have been used for assigning ‘good’ and ‘poor’ learners were teachers’ judgement or language achievement based on tests. Some studies used both criteria. In the present study also, both criteria have been used, but the procedure regarding how the two criteria are combined was different from other studies (5.5.3).
Main areas of investigation

- Strategies of many aspects of vocabulary learning have been investigated, such as finding the meanings of new words, memorization techniques, dictionary use, note-taking, practice etc. Learners' strategies in relation to seven areas, covering the whole process of vocabulary learning have been examined in the present study (see section 4.2).

- Some studies of vocabulary learning have been confined to reading, and this may be useful and helpful in assessing the use of certain strategies. But this approach might prevent the researcher from covering other important aspects of vocabulary learning such as practising newly learnt words. The present study has not restricted its focus to reading; instead it has investigated vocabulary learning strategies in general.

- Although various vocabulary learning strategies have been identified, little is known about learners' behaviours in the classroom. The present study has attempted to examine learners' strategies both in and out of class (see section 4.5).

- It has been shown that some types of strategies such as metacognitive, dictionary use and practice seem to play a dominant role in vocabulary learning success in ELT and these merit special attention in the TAFL context (4.2.2, 4.2.5 & 4.2.6).

- Some studies have paid special attention to how students memorize new words, in the sense that the memorizing of new vocabulary items is an essential component of vocabulary acquisition. This aspect, therefore, has been a main area of examination in the present study (4.2.4).

Factors affecting the choice of vocabulary learning strategies

- Many variables have been investigated in relation to the use of vocabulary learning strategies. These factors include previous learning experience, age, gender, language proficiency, learning styles, learning environment, modality presentation, expected field of study and previous instruction in how to use vocabulary learning strategies. However, other factors which are relevant to the TAFL context have been examined in the present study through the survey (see section 4.4).

- Some studies have shown that learners at different levels of proficiency may employ different types of strategies, but the results are mixed. While most studies (Cohen & Aphek, Al-Qarni, Erten) showed that more advanced students used more strategies than did less advanced students, some other studies (Payne, Stoffer) found the opposite, so this issue might need to be investigated further. As a result, the present study has examined variation in learners' reported strategy use according to their proficiency levels (4.4.1.2).
Data-gathering techniques

- Data collection instruments employed in the vocabulary learning strategy research include questionnaires, interviews, think-aloud protocols, diaries, learning sheets, and written reports. Some studies (e.g. Stoffer, AlQarni, Schmitt) have used only one instrument to gather data on learners' strategies, whereas other studies (e.g. Ahmed, Atherton) have employed more than one method.

- A multiple approach is needed if more detailed, accurate and valid data is to be obtained. As such, a multiple approach consisting of three instruments (diaries, interviews and questionnaire) has been utilised in the present study (5.3).

- Sanauoi's study is considered one of the most important that has contributed significantly to our knowledge about students' behaviours in learning vocabulary. I believe that one of the salient features of this study is its methodology by using diaries in the data collection process. Consequently, the present study has made use of this instrument as one of the main research methods (5.5.1).
3.4 Classification of Second Language Learning Strategies

Various attempts have been made to produce different inventories of learning strategies (Rubin 1975; Tarone 1981; O’Malley & Chamot 1990; Oxford 1990). Perhaps because of the differences between the definitions of learning strategies (3.2), there is no generally agreed typology. The following is a description of the second language learning and vocabulary learning strategy inventories from some of which the vocabulary strategy classification used in this study of vocabulary learning strategies is derived (see section 4.2 in Chapter Four for a detailed description of the process of developing this classification).

3.4.1 Classification of second language learning strategies in general

By using different criteria and different definitions and concepts of learning strategies, researchers classify learning strategies in different ways. Naiman et al. (1978), for example, divide strategies into two classes -primary and secondary- according to their different impacts on language learning. Similarly, Dansereau (1978) distinguishes two categories: primary and support strategies. Tarone’s (1981) scheme, on the other hand, consists of three primary strategies: learning, communication and production. She regards the first one as strategies for language learning and the other two as strategies for language use. Wenden (1991), in comparison, distinguishes two categories: cognitive strategies and self-management strategies on the basis of their function in learning. The three strategy classification systems (Rubin 1987; O’Malley & Chamot 1990 and Oxford 1990) which are most frequently referred to in the literature and which seems to have made the most important contribution to our knowledge of learning strategies, will be reviewed in some detail in the following sub-sections.

3.4.1.1 Rubin’s (1987) classification system

Rubin (1975, 1981, 1987) introduces one of the earliest typologies of language learning strategies. Her classification system consists of two broad categories: strategies that may contribute directly to learning and those that may contribute indirectly. These two broad categories are further classified into three primary categories: learning, communicative and social strategies. According to Rubin, learning strategies are those that contribute directly to language learning, while
communication strategies contribute less directly, and social strategies have the least
direct contribution to learning. As can be seen in Figure 3.1 below, learning
strategies are divided by Rubin into direct strategies and indirect strategies. Direct
strategies involve learning strategies which are divided into cognitive and metacogni-
tive strategies. Indirect strategies, on the other hand, involve communicative and
social strategies.

![Figure 3.1 Rubin's classification of language learning strategies](image)

- **Learning strategies** are those which "contribute to the development of the
  language system which the learner constructs and affect learning directly" (Rubin
  1987: 23). These include two main categories: cognitive and metacognitive strate-
gies.

1. **Cognitive strategies** are defined as "steps or operations used in learning or
  problem-solving that require analysis, transformation, or synthesis of learning mate-
  rials" (Rubin 1987: 23). Rubin suggests six cognitive learning strategies:
• **Clarification/verification** is the process of attempting to clarify and confirm the rules and regulations being learned in the target language.

• **Guessing/inductive inferencing** is using prior knowledge and available information to infer the meanings of new items.

• **Deductive reasoning** is looking for more general rules; for example, finding organisation and patterns in the target language.

• **Practice** refers to strategies such as repetition, imitation, and rehearsal which contribute to the storage and use of language focusing on accuracy.

• **Memorization** is similar to practice but the focus here is on storage and retrieval rather than on accuracy.

• **Monitoring** is thought to be a combination of cognitive and metacognitive strategies in which the learner directs his/her attention to linguistic and communicative errors and then makes decisions about them.

2. **Metacognitive strategies** are related to knowledge about cognition, regulation and application of this information and also to self-directed learning through processes such as planning, monitoring and evaluating.

   - **Communicative strategies** involve using one’s linguistic and communicative knowledge to maintain continuity in a conversation. Example strategies include the use of synonyms, cognates, gestures, mime, circumlocution, and repeating utterances. Although using communicative strategies may be helpful for learning, they do not exactly contribute to learning directly as the focus is mainly on better communication, thus, indirectly helping learning to take place.

   - **Social strategies** create opportunities for learners to be exposed to, and allow them to practise, the target language. They include creating favourable opportunities to initiate communication in the target language, and using facilities such as TV and radio, reading books, going to movies and attending parties where the practice is possible. Social strategies do not contribute to learning directly since they are merely used to create an appropriate environment for language exposure and practice.
3.4.1.2 O’Malley & Chamot’s (1990) classification system

Another frequently used language learning strategy typology is the one developed and refined by O’Malley, Chamot, and their colleagues (O’Malley et al. 1985a & b; Chamot 1987; Chamot & Kupper 1989; and O’Malley & Chamot 1990) through a series of studies involving classroom observation, interviews, think-aloud procedures, and strategy instruction.

As can be noticed in Figure 3.2 below, this inventory consists of three main categories: cognitive, metacognitive, and social/affective strategies. This tripartite grouping is quite similar to that of Rubin’s (1987) second layer of strategy (learning, communication and social strategies).

![Figure 3.2 O’Malley & Chamot’s classification of language learning strategies](image)

1. **Cognitive strategies** are mental operations for storing and retrieving information. Cognitive strategies include repetition, resourcing, translation, grouping, note-taking, deduction, recombination, imagery, auditory representation, keyword method, elaboration, transfer, and inferencing.

2. **Metacognitive strategies** refer to self-management procedures which include planning, directed attention, selective attention, self-management, self-monitoring, problem identification and self-evaluation.
3. Social/affective strategies refer to strategies which involve interacting with other people or using effective control to assist learning and include asking questions for clarification, cooperation and self-talk.

The strength of O’Malley and Chamot’s taxonomy comes from the fact that the researchers have attempted to ground their classification system within the information-processing model of learning developed by Anderson (1980), and that it was based on empirical evidence obtained from a series of studies (Erten 1998). However, this classification system has come under criticism in the literature. It has been argued that some categories such as “selective attention” and “directed attention” are very similar and seem to overlap, causing coding errors (Young 1996). Nevertheless, this classification system is very important for the present study since the cognitive/metacognitive distinction has been employed in the vocabulary learning strategy classification developed in this study (4.2).

3.4.1.3 Oxford’s (1990) classification system

Oxford (1990), building on the earlier classification schemes, provides us with the most comprehensive and detailed classification of learning strategies to date, known as the Strategy Inventory for Language Learning (SILL). This inventory has been used by a large number of researchers in different countries. Oxford and Burry-Stock (1995) estimate that the SILL has been used as one of the main data collection instruments in at least 40-50 major studies, involving approximately 8000-8500 language learners.

Oxford’s classification scheme consists of two classes, six groups, nineteen sets and a total of sixty-two strategies. As can be seen in Figure 3.3 below, learning strategies are divided by Oxford into direct and indirect strategies. Direct strategies involve memory, cognitive and compensation strategies. Indirect strategies, on the other hand, involve metacognitive, social and affective strategies.
Direct and indirect strategies in this classification correspond to those of Rubin (1987), but Oxford defines them differently. She defines direct strategies as those which require mental processing of the language and therefore deal directly with the language itself. Indirect strategies, on the other hand, are those which deal with the general management of language learning, in which the target language is not directly involved. However, Oxford points out that in most cases, direct and indirect strategies support each other.

1. **Direct strategies** include the following three groups of strategies: memory strategies, cognitive strategies and compensation strategies. Oxford points out that these three types of direct strategies perform mental processing of the language differently and for different purposes.
Memory strategies help learners to process, store and retrieve information to facilitate overall language learning. Examples of these strategies are grouping, using keyword and structured reviewing.

Cognitive strategies enable learners to understand and produce the language. Examples of this group of strategies are practising naturally, repeating, translation, transferring and analysing contrastively.

Compensation strategies help learners to overcome the problems associated with their limited target-language knowledge. Among the compensation strategies are guessing intelligently by using linguistic clues, coining words and selecting the topic.

2. Indirect strategies support learning and are used to manage the whole learning process; they do not necessarily involve the direct use of the target language, and include the following three groups of strategies: metacognitive strategies, affective strategies and social strategies.

Metacognitive strategies are those which help learners to control their own cognition, and facilitate their co-ordination of the learning process. Examples of this group include strategies of paying attention, self-evaluation, and self-monitoring.

Affective strategies help learners to deal with their emotional involvement and to control their emotions, attitudes, and motivation. Among the affective strategies are discussing feelings with someone else, using mediation, using laughter and rewarding oneself.

Social strategies create opportunities for language practice and help to develop cultural understanding. Examples of this type include asking for clarification and co-operating with others.
It has been claimed (Kayaoglu 1997) that this classification is very systematic in that individual strategies, as well as strategy groups are linked with each of the productive and receptive skills such as writing, speaking, reading and listening, thereby providing information not only about the type of strategy, but also the type of task and setting where the strategy could be used. However, some issues have been raised in the literature regarding Oxford’s classification system. First, O’Malley and Chamot (1990) argue that Oxford’s inventory has no cognitive-theoretical foundation and includes overlapping sub-categories. In response to this criticism, Oxford (1992: 20) claims that her system “is based on the theory that the learner is a ‘whole person’ who uses intellectual, social, emotional, and physical resources and is therefore not merely a cognitive/metacognitive information-processing machine”. Second, Hermann-Brennecke (1991) criticises the direct-indirect strategy classification by arguing that some direct strategies such as using mimes or gestures and avoiding communication may not involve direct use of the target language, while some indirect strategies such as asking questions involve language use.

Having discussed some classification systems of language learning strategies in general, the next section focuses on vocabulary learning strategy classification in particular.

3.4.2 Classification of vocabulary learning strategies

Although vocabulary learning strategies have been dealt with indirectly within the classification systems of general language learning strategies reviewed in the previous section, under the categories of memory and cognitive strategies, the attempts of certain scholars to classify vocabulary learning strategies specifically have not yet been discussed; these will be considered in the following sub-sections.

3.4.2.1 Cohen's (1990) classification system

Cohen (1990) provided one of the earliest classification systems for vocabulary learning strategies. As can be seen in Figure 3.4 below, Cohen’s classification system consists of three different groups: strategies for remembering words, vocabulary learning strategies and strategies for practising words.
1. **Strategies for remembering words** which include refined versions of the eleven types of association techniques identified in Cohen and Aphek (1981, see subsection 3.3.3). The number of these associations has been reduced from eleven to nine (Cohen 1987):
   - Linking the word to the sound of a word in the native language, to the sound of a word in the target language, or to the sound of a word in another language.
   - Attending to the meaning of a part or several parts of the word.
   - Noting the structure of part or all of the word.
   - Placing the word in the topic group to which it belongs.
   - Visualising the word in isolation or in a written context.
   - Linking the word to the situation in which it appeared.
   - Creating a mental image of the word.
   - Associating some physical sensation with the word.
   - Associating the word with a keyword.

Cohen (1990: 26) points out that this "is not a definitive list of all possible types of associations. Rather it is intended to be suggestive of some of the more popular approaches to generating associations".

2. **Vocabulary learning strategies**, which comprise three strategies:
   - Word analysis.
   - Learning of cognates.
   - Using a dictionary.
These three strategies seem to be used mainly for discovering the meanings of new words, though Cohen does not say so explicitly. Moreover, the term 'vocabulary learning strategies', which is used for this group, is very broad.

3. Strategies for practising words, which comprise three strategies:
   - Use of flashcards.
   - Grouping.
   - Cumulative vocabulary study (explanation followed by planned repetition of the words in a variety of typical contexts).

It is not clear what Cohen means here by 'practising' because, while the use of flashcards could be regarded as a practice strategy, grouping is difficult to use for practice purposes. However, it may be that 'practising' means here consolidating vocabulary learning (Erten 1998).

Two concerns might be raised regarding this classification system. First, a very limited number of vocabulary learning strategies are contained within each group. Second, while the second group is distinct in that it includes strategies for discovering the meanings of new words, the other two groups seem to be similar to each other, since both of them involve strategies to consolidate vocabulary learning or to commit vocabulary to memory.

3.4.2.2 Brown & Payne's (1994) classification system

Brown and Payne's (1994, cited in Hatch & Brown 1995) classification system comprises five groups of strategies which they call 'five essential steps' and they claim that students need all five steps in order to have a full knowledge of the words they want to learn. As can be noticed in Figure 3.5 below, these five steps (encountering new words, getting the word form, getting the word meaning, consolidating word form and meaning in memory and using the words) constitute a sequential order of vocabulary learning processes.
Figure 3.5 Brown and Payne's classification of vocabulary learning strategies

Step 1 Encountering new words contains strategies used to create opportunities to encounter new words to learn, such as watching TV, listening to the radio, reading newspapers and magazines, interacting with native speakers, and studying word lists and textbooks.

Step 2 Getting the word form, which includes strategies aimed at getting a clear image -visual or auditory or both- of the forms of new words. Among the strategies in this group are associating new words with words that sound similar in the native language, writing the sounds of words using sound symbols from the native language, associating words with words in another language that are similar, associating a word with a similar-sounding known word in the target language, seeing a word that looks like another known word.
Step 3 Getting the word meaning, which includes the following strategies: asking native speakers what words mean, asking people who speak the native language about the meaning of new words, making pictures of word meanings in the mind, explaining what one means and asking someone to give the target language word for that meaning, using the dictionary, and guessing.

Step 4 Consolidating word form and meaning in memory, which includes Oxford’s (1990) memory strategies (3.4.1.3) and Cohen and Aphek’s (1981) association techniques (3.3.3 & 3.4.2.1). Hatch and Brown (1995: 389) argue that the “more words learners can get through this step, the more words they will know overall”.

Step 5 Using the words, which involves using newly learnt items in meaningful and communicative contexts. Brown and Payne suggest that this step is not necessary if the goal is receptive vocabulary knowledge

This classification system has various limitations. First, although the first step is very important for this study (see section 4.2 in Chapter Four), it seems not to be vital in terms of learning a second language in formal settings, because the classroom provides students with new words; what students do in this respect is regarded as making use of additional sources for encountering new items. This difference should be taken into account. Second, the distinction between steps 2, 3 and 4 appears to be artificial because all these steps contribute to consolidating word form and meaning in memory (Erten 1998). Third, some strategies in step 3, such as asking native speakers what words mean and using the dictionary, are used to discover the meanings of new words, which might occur at the beginning of the process of learning words, rather than to consolidate words in the memory. Thus, they should be placed before step 2 or, probably, in step 1.
3.4.2.3 Schmitt's (1997a) classification system

Schmitt and Schmitt (1993) proposed a vocabulary learning strategy taxonomy, which has been refined by Schmitt (1997a). This classification system is an important contribution in terms of providing a general framework for classifying vocabulary learning strategies, and is characterised by its comprehensiveness in including many aspects of vocabulary learning. This classification system is based on a discovery/consolidation distinction and on Oxford’s (1990) categorisation system (3.4.1.3).

Schmitt initially classifies vocabulary learning strategies into two major groups:

- **Discovery strategies**, which involve the initial learning of new word meanings.
- **Consolidation strategies**, which involve studying and remembering the word's meaning once it is known.

These two groups correspond to Nation's (1990) distinction between 'increasing vocabulary', which means "introducing learners to new words and thus starting their learning" (p.6), and 'establishing vocabulary', which means "building on and strengthening this initial knowledge" (p.6). There is also a second layer in this classification in which strategies in the two major groups (discovery and consolidation) are further classified as determination, social, memory, cognitive and metacognitive. This second layer has been drawn mainly from Oxford’s taxonomy.

As can be seen in Figure 3.6 below, vocabulary learning strategies are divided by Schmitt into discovery and consolidation strategies. Discovery strategies involve determination and social strategies. Consolidation strategies, on the other hand, involve social, memory, cognitive and metacognitive strategies.
1. **Discovery strategies** are divided into two classes of strategies: determination and social strategies.

- **Determination strategies** include analysing part of speech, analysing affixes and roots, checking for L1 cognates, analysing any available pictures or gestures, guessing from the textual context, and using bilingual dictionary, monolingual dictionary, word lists, and flash cards.

- **Social strategies** include asking the teacher for an L1 translation, asking the teacher for a paraphrase or synonym of the new word, asking the teacher for a sentence including the new word, asking classmates for the meaning, and discovering the meaning through group work activity.
2. Consolidation strategies are divided into four classes of strategies: social, memory, cognitive and metacognitive strategies.

- **Social strategies** include studying and practising the meaning of the new word in a group, teacher checking students' flash cards or word lists for accuracy, and interacting with native speakers.

- **Memory strategies** include strategies either to organise mental information together or transform it in a way which makes it more memorable. Memory strategies are: studying the word with a pictorial representation of its meaning, forming an image of the word's meaning, connecting the word to a personal experience, associating the word with its coordinates, connecting the word to its synonyms and antonyms, using semantic maps, using scales for gradable adjectives, peg method, loci method, grouping words together to study them, grouping words together spatially on a page, using the new word in sentences, grouping words together within a storyline, studying the spelling of a word, studying the sound of a word, saying the new word aloud when studying, imaging the word's form, understanding initial letter of the word, configuration, using keyword method, studying affixes and roots, and parts of speech, paraphrasing the word's meaning, using cognates in study, learning the words of an idiom together, using physical action when learning a word, using semantic feature grids.

- **Cognitive strategies** include strategies that are less obviously linked to mental manipulation. Cognitive strategies are verbal repetition, written repetition, using word lists and flash cards, taking notes in class, using the vocabulary section in the student's textbook, listening to tapes of word lists, putting English labels on physical objects, and keeping a vocabulary notebook.

- **Metacognitive strategies** include using English language media (songs, movies, newscasts, etc.), testing oneself with word tests, using spaced word practice, skipping or passing new word, and continuing to study the new word over time.
It is worth mentioning that Schmitt does not include any metacognitive strategies for the discovery of word meanings, and I believe that metacognitive strategies can be used at any stage in the process of vocabulary learning. However, this taxonomy is very important for this study as the discovery/consolidation distinction has been employed in the vocabulary learning strategy classification proposed in this study (see section 4.2 in Chapter Four).

3.5 The Lack of L2 Vocabulary Acquisition Theory

The vocabulary strategy classification systems discussed in the previous section are inventories of vocabulary learning strategies mainly derived from learners’ behaviour data, but they are not theories which describe the process of acquiring L2 vocabulary.

Moreover, there is currently no one generally accepted overall theory of how L2 vocabulary is acquired (Schmitt 2000). However, there are some models of L2 vocabulary acquisition, such as Crothers and Suppes’ model, Riegel’s model of vocabulary growth (cited in Meara 1997), Morton’s logogen model and Marslen-Wilson’s cohort model (cited in Singleton 1999), but they are not as influential as they perhaps ought to be, and they certainly do not form part of mainstream thinking about second language vocabulary acquisition (Meara 1997: 112).

This is because these models do not provide a detailed description of the process of lexical learning and its important features (Meara 1997), do not take account of both implicit and explicit vocabulary learning (Schmitt & McCarthy 1997) and do not also consider all different factors that affect L2 vocabulary acquisition (Schmitt 2000).

Because of the lack of such a theory and because none of the strategy classification systems described in the previous section is completely suitable for this study, a vocabulary learning strategy classification has been developed to serve as an operational model for the present study (see section 4.2 in Chapter Four).

3.6 Chapter Summary

This chapter has discussed the definition of the construct “strategy”. It has highlighted the fact that there is no single agreed definition of learning strategies. However, a particular definition and certain features of learning strategies have been
adopted for the purpose of this study. The research on vocabulary learning strategies has then been examined. Although there is no vocabulary strategy research on Arabic, the literature has provided some important research directions for the present study. Finally, some categorization systems of both general language learning and vocabulary learning strategies have been examined as the main source of the vocabulary learning strategy classification proposed in this study.

Having reviewed vocabulary learning strategy literature, the next chapter will discuss the research issues for investigating vocabulary learning strategy use by AFL learners in Saudi Arabia.
Chapter Four

RESEARCH ISSUES INVESTIGATED

4.1 Introduction
The aim of this chapter is to isolate and focus on the research issues related to the investigation of vocabulary learning strategies in the TAFL context in Saudi Arabia. It consists of five main sections. The chapter will begin with a discussion of the process of developing the vocabulary learning strategy classification adopted in this study, which serves as its general framework. This will be followed by a justification of investigating the relationship between vocabulary strategy use and success. The factors that affect the choice and use of vocabulary learning strategies which have been examined in this study will then be considered. The following section will justify taking into account both in-class and out-of-class vocabulary learning strategies. Finally, the issue of how AFL learners deal with diglossia will be discussed.

4.2 A Proposed Vocabulary Learning Strategy Classification
Because of the lack of an accepted L2 vocabulary acquisition theory (3.5), it was seen necessary for this study to develop a vocabulary learning strategy classification which is comprehensive and practical. This classification builds on two of the key classification systems available to date: those of Schmitt (1997a) and O’Malley and Chamot (1990). It is based in part on Schmitt’s discovery/consolidation distinction (3.4.2.3) and in part on O’Malley & Chamot’s cognitive/metacognitive distinction (3.4.1.2). The classification scheme proposed in this study comprises seven categories covering the whole process of vocabulary learning. The purpose of this classification is to serve as a general framework for this study. Therefore, its aim is not to list all possible strategies under each category but to enable the researcher to approach the vocabulary learning strategies and to help him investigate them in a systematic way. This framework permits the consideration of multiple aspects of vocabulary learning and the analysis of vocabulary acquisition from the earliest stages of encountering new lexical items to the proficient use of these items. Further, it addresses both vocabulary comprehension and production.
The five main categories: namely, non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorization and practice which are displayed in the middle of Figure 4.1 below represent five steps in learning vocabulary. As for the other two categories which are around the diagram, the first one (metacognitive strategies) can be used at any one of these steps, and the second (expanding lexical knowledge) can involve all these five steps.

Figure 4.1 Vocabulary learning strategy classification adopted in this study

Figure 4.1 is the outcome of three processes in developing this framework, which now I will explain. First, from the discovery/consolidation perspective, the present classification has five categories: two for discovery purposes and three for consolidation purposes as can be seen in Figure 4.2 below. Discovery means establishing the meanings of new words, while consolidation means studying and remembering the meanings of these words. Students need to understand and conceptualise the meanings of words before they can work towards integrating these meanings into their mental lexicon.
As can be noticed in Figure 4.2 above, the strategies for discovery purposes (finding out about the meanings of new words) are divided into two categories: non-dictionary strategies for discovering the meanings of new words, and dictionary use strategies. Two points need to be made clear here. The first point is that social strategies, which are one of the two categories of discovery strategies in Schmitt’s taxonomy, will not be given a separate category in the present classification. This is because any one of these categories can involve social interaction. For example, a learner may cooperate with others in order to discover the meaning of a new word, to practise it, or to help him/her to memorize it.

The second point is that the reason for putting dictionary use in a category by itself is its importance in vocabulary learning - it is usually the most important source of word meaning students consult in the context - and also its involvement of several behaviours associated with vocabulary learning (Ahmed 1989).

The strategies for consolidation purposes (studying and remembering the word’s meaning once it is known) are divided into three categories: note-taking, memorization, and practice as can be seen in Figure 4.2 above. The use of non-dictionary strategies for discovering meanings and dictionary use strategies can be followed and complemented by the use of note-taking, memorization, and practice strategies to commit words to memory.
Although this framework incorporates a linear order of vocabulary strategy use, it does not assume that vocabulary acquisition follows this order. The advantage of using this framework is that it provides a mechanism for comprehensively investigating vocabulary learning strategies. This order has been reflected in the research instruments (see Appendices 1, 5 and 8) and has influenced the way the data have been collected. The advantage of following this order when collecting data is that the researcher does not leave out any aspect of the seven categories. However, there was flexibility in data collection, whereby in some cases this order was not followed, according to the way the interview was developing with some interviewees (5.5.2.1).

Second, from the cognitive/metacognitive perspective, this classification has six categories: the first five categories, which are the categories of discovery and consolidation purposes, fall within the cognitive dimension, while the sixth represents metacognitive strategies as can be seen in Figure 4.3 below.

![Vocabulary Learning Strategies](image)

**Figure 4.3 Vocabulary learning strategies from cognitive/metacognitive perspective**

The term cognitive, however, is too broad and cannot be used when collecting data from learners. Therefore, this term is not used as such and instead, the cognitive dimension is broken into five categories: non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorisation, and practice.
In the present classification, metacognitive strategies are not included in either discovery or consolidation strategies. Rather, they are seen as general strategies which can be employed at any stage of vocabulary learning. As such, they are classified as a separate group which form the sixth category in the present classification of vocabulary learning strategies.

The final process in developing this classification is adding a seventh category to these six categories; that is, expanding lexical knowledge. It refers to the learner’s own efforts to look for opportunities to meet and learn new words outside the world of the classroom (4.2.7). This ‘super’ category involves all the above elements of vocabulary learning, but may not be essential, since some learners might content themselves with only what is taught in the class. This final category in the present classification corresponds to step 1 in Brown and Payne’s (1994) classification system (3.4.2.2).

Each of the seven categories mentioned above represents one stage of vocabulary learning which learners go through, at least at some minimal level, to come to a full productive knowledge of words. These seven categories also may possibly reflect a sequence of learning lexical items characteristically in formal situation, although no evidence was found in this study to support this. Further, these categories are not treated as discrete points, but could be seen as a series of processes which involves using these processes in parallel or returning to a process used earlier, as illustrated in Figure 4.1 above. There is a broad range of activities, strategies, or techniques that individuals can use within each category. As noted earlier, this framework, consisting of seven categories, is an operational model which can be used practically in investigating vocabulary learning strategies. These categories have also been used in the data analysis. The seven categories are described in more detail below.

4.2.1 Non-Dictionary strategies for discovering the meanings of new words
‘Discovering the meanings of new words’ refers to learners’ strategies for arriving at the meanings of unfamiliar items. This aspect is the first step in vocabulary learning and is regarded as the most important for learning new words, since how the learner learns a word depends on how he/she discovers its meaning: “all learners must get the meaning of words in some manner, or the words can never be considered truly
learned" (Hatch & Brown 1995: 385). To discover the meanings of new words, learners may refer to one or more sources and they may employ one strategy or several. This depends on various factors: perceived word difficulty, word importance, the source consulted, the context where the word has been met, the learning environment (in class or out of class), the learners themselves (learning styles, motivation, study habits) and so on.

Ahmed (1989, sub-section 3.3.4) found that his subjects used the following strategies in addition to dictionary use to discover the meanings of new words: asking classmates, guessing, asking the teacher, enquiring about the meaning by asking for an English paraphrase or synonym, asking for the Arabic equivalent, asking for a sentence showing word usage, and group work. Moreover, Scholfield (1997) claims that the meanings of words are not simply either known or not known by second language learners; he points out that there is sometimes an intermediate state where the students experience a lack of confidence in their understanding. In this case, the students may refer to sources other than those they usually consult.

Guessing, which has been widely referred to in most classification systems as a cognitive strategy (e.g. Rubin 1981), is one of the most important discovery strategies. Haastorp (1987: 197) defines guessing as a process that "involves making informed guesses as to the meaning of (part of) an utterance in the light of all available linguistic cues in combination with the learner's general knowledge of the world, her awareness of the situation and her relevant linguistic knowledge". However, although guessing involves semantic treatment of the input, some researchers (Arnaud & Savignon 1997) consider it as a reading strategy rather than a vocabulary learning strategy. In this study, it has been decided to include it. Elshout-Mohr and Daalen-Kapteijns (1987) investigated the mental processes involved in the process of vocabulary learning through guessing, and claimed that the process of guessing word meanings is based on explicit mental operations with regular patterns and that a learner's existing knowledge plays a vital role in the acquisition of new words.

Regarding asking others, students may differ in the types of question or information they look for. Some students may have an idea of the meaning of a given item, but
they ask in order to confirm their knowledge or to get further information about the item so as to be confident when dealing with it in the future. Other second language researchers (Jacobs, Dufon & Hong 1994) have investigated the use of glosses while reading as a source of vocabulary learning.

4.2.2 Dictionary use

'Dictionary use' is one type of strategy for using resources which is regarded as cognitive in most classification systems (O’Malley & Chamot 1990; Oxford 1990). Although dictionary use is considered to be one form of discovering the meanings of new words, in this study it has been dealt with as a separate category. Thus, students have been asked to report in detail how they use their dictionaries to learn Arabic vocabulary items (see Interview Guide, Appendix 5).

Scholfield (1997) argues that dictionary use deserves more attention from SLA researchers than it has so far received. Baxter (1980: 329) also maintains that dictionary use is “an important factor in the shaping of student vocabulary behaviour”, and can facilitate the learning of foreign vocabulary (Luppescu & Day 1993). Moreover, knowing more about the process of how dictionaries are used can lead to more effective dictionary design (Schmitt & McCarthy 1997). In the TAFL context, not much is known about foreign students’ use of Arabic dictionaries, and dictionary use skills have tended to be neglected. As a result, one of the aims of this study is to gain insights into the strategies associated with dictionary use employed by learners of Arabic.

It should be noted that using an Arabic dictionary is a more demanding activity than in the case of English, where all that is required to find any word is knowledge of the alphabet. Using Arabic dictionaries efficiently requires a knowledge of morphology as well as of the alphabet, because the words in Arabic dictionaries are arranged in the alphabetical order of the roots from which they are derived (see section 2.3 in Chapter Two). However, a description of the organisational principles of Arabic dictionaries is not within the scope of this investigation.

In the TESOL context, publishers have developed monolingual dictionaries for L2 students which give detailed guidance on grammar, pronunciation, and usage; they
also provide definitions written in a controlled, simplified vocabulary, as well as specific examples of words in context (Carter 1987b). The monolingual dictionary designed for non-native speakers does not seem to be common in TAFL, let alone bilingualised dictionaries which contain both the monolingual information about a word and its translation into the learner's mother tongue (Laufer & Kimmel 1997). According to Sieny and Kashu (1995), there are 324 dictionaries for non-native speakers of Arabic, most of which are bilingual dictionaries. There are only two monolingual Arabic dictionaries that are intended for non-native speakers, and one of these is designed for both native and non-native Arabic speakers. It should be noted that the availability of a dictionary may affect its use.

4.2.3 Note-taking

'Note-taking', which is the third category in the present classification of vocabulary learning strategies, is a cognitive strategy which is not generally considered to be as central to vocabulary learning as, say, dictionary use or memorization techniques. But it has been found to be among the cognitive strategies most frequently used by second language learners. For example, in a study of high school ESL students carried out by O'Malley et al. (1985b), note-taking was one of the most frequent cognitive strategies used by ESL learners. With specific reference to vocabulary strategy research, Kojic-Sabo and Lightbown (1999, see sub-section 3.3.21) found that the note-taking strategy was used very frequently, and some students kept elaborate written records of new words so as to review them more easily, while others took notes to aid memorization. Al-Qarni (1997, see sub-section 3.3.19) also found that his subjects used the note-taking strategy frequently, recording new items in a vocabulary notebook or in the margins of the textbook. As a result, taking notes of new vocabulary items seems to be "quite an important part of language learning for many students" (McCarthy 1990: 127). Furthermore, understanding how foreign language learners organise their notes is one way of understanding how they group words.

According to White (1996), there are three views regarding the effects of note-taking on learning. According to the first view, note-taking itself is seen as effective independent of review since it increases attention and helps with the encoding of materials. The second view is that students' notes serve principally as a means of
recording information for later review. The third view holds that note-taking is a
genерative activity that encourages students to build connections between what is
presented and what they know. In the present study, note-taking is seen to be used for
all three purposes: students may record new items to help them encode the words, to
use their notes for reviewing, and to build connections between new words and
previously learnt words. In addition, three main areas of investigation have been
considered in this study with respect to note-taking (see Interview Guide, Appendix
5):

- The place of the notes.
- The content of the notes.
- The organisation of the notes.

4.2.4 Memorization
In this study, I mean by a 'memorization strategy' any technique used by the learner
to commit words to memory in order to be able to retrieve them when needed,
regardless of whether this technique is linked to mental manipulation. The storage
and retrieval of new words is a very important aspect of vocabulary learning.
Memorization techniques help learners store in their memory the lexical items they
learn, thus enlarging their vocabulary knowledge. These techniques also enable
learners to retrieve words from memory when they need to use them for
comprehension or production.

There is a considerable amount of research on how students retain L2 vocabulary by
using certain strategies, in recognition of the fact that the long-term retention of new
words is one of the greatest problems in learning a second language, and the
successful retention of words is essential to the expansion of one's vocabulary size.
Cohen (1987) lists various ways of attempting to commit new vocabulary to memory
including rote repetition, noting structure (analysing the word according to its root,
affixes, and inflections as a way to understand its meaning), semantic strategies
(thinking of synonyms so as to build a network of inter-linking concepts, clustering
words by topic group or type of verb, or linking the word to the sentence in which it
was found or to another sentence), and the use of a mnemonic device. Stoller and
Grabe (1993) also review several powerful memory techniques, including semantic feature analysis, semantic mapping, and the keyword method.

Moreover, considerable work has been done on mnemonic techniques as memorization strategies. The term mnemonic means “aiding the memory” (Higbee 1979). According to Levin (1981: 65), mnemonic techniques “involve physically transforming to-be-learned materials into a form that makes them easier to learn and remember”. Cohen (1987) claims that mnemonic aids are most beneficial in successfully guiding students to remember L2 vocabulary. In his review of mnemonic techniques, Thompson (1987: 54) concludes that “[w]hat is needed today … is a line of research which involves naturalistic observations in real environments where learners use spontaneously generated memorization strategies”. This is what has been done in the present study of vocabulary learning strategies, which has documented the memorization strategies reported by AFL learners.

4.2.5 Practice

Practice is widely recognised as an essential condition for developing skills in a foreign language:

Practice that involves dealing with information in a consistent manner (and not mere repetition) has been demonstrated to be a major factor in determining the development of high levels of skill, because it is just such extensive consistent practice that leads to automatization (Segalowitz 1991: 61)

The importance of practice, specifically in vocabulary learning, is well established and the ability to make use of newly learnt words is a vital requirement of full vocabulary knowledge. McCarthy (1990: 43) argues that “if a language learner cannot actively use a particular word when it is needed… then we might feel that we are dealing with an incomplete knowledge of the word”. In addition, vocabulary practice appears to provide a ‘mild guarantee’ that words and their meanings will not fade from memory once they are learnt and it is also a form of hypothesis testing (Hatch & Brown 1995: 390).

Bialystok (1981) has distinguished between two types of practice: formal practice and functional practice. The aim of the former is to improve formal language skills in a context devised specifically for second language practice. On the other hand,
functional practice consists in finding opportunities to use the language in communicative situations. In this study, I mean by ‘practice’ any activity students engage in (in or out of class) to use new lexical items, which involves both formal and functional practice of words.

Students always need opportunities to use newly acquired vocabulary, but in the TAFL context there are few opportunities for natural interaction with proficient Arabic users since most people speak Colloquial Arabic, which is different from Standard Arabic, the variety that students are learning (2.3.1). AFL learners, therefore, have more restricted language experiences in the L2: they depend almost exclusively on the L2 input they receive at ITANA and therefore encounter words in less diverse situations than, for example, ESL learners.

4.2.6 Metacognitive strategies

The term ‘metacognitive’ was coined by Flavell (1979), who defined it as knowledge about one’s own cognitive processes and the control over these processes. Thus, metacognitive strategies are higher order executive skills which involve the steps taken by learners to manage or regulate their learning, such as planning and arranging for learning tasks, setting goals and objectives, monitoring the learning process for errors, and evaluating progress.

Metacognitive strategies have been categorised as a fundamental group of strategies in many taxonomies of learning strategies (O’Malley & Chamot 1990; Oxford 1990, see section 3.4 in Chapter Three). They are essential for successful language learning. Research has identified learners’ metacognitive knowledge as a major influence on the way they use learning strategies to develop second language competence (Wenden 1986b, 1987). Metacognitive strategies also “contribute heavily to the ability to be an autonomous learner” (McDonough 1999: 13). Ellis (1994: 268) states emphatically that “metacognitively sophisticated language learners excel”. It has also been claimed that the difference between good and poor learners lies in their use of metacognitive strategies (Chamot & O’Malley 1994). Furthermore, Vann and Abraham (1990) suggest that unsuccessful learners lack certain metacognitive skills which would enable them to assess a task and then apply an appropriate strategy.
Students without metacognitive approaches are essentially learners without direction or opportunity to plan their learning, monitor their progress, or review their accomplishments and future learning directions (O'Malley & Chamot 1990: 8).

4.2.7 Expanding lexical knowledge

'Expanding lexical knowledge' refers to learners' attempts to create opportunities to encounter new vocabulary items outside class. Little is known about these sources of new vocabulary used by learners of Arabic, or about "precisely how much vocabulary is absorbed and acquired in this way" (McCarthy 1990: 37). By investigating this aspect, we can gain information about the predominant types of out-of-class input AFL learners are subjected to, and possibly come to some conclusions about the efficacy of different inputs. Given the diglossic situation of Arabic (2.3.1), AFL learners may have to create for themselves opportunities to encounter new Arabic words, such as interacting with educated people including teachers who can speak Standard Arabic.

Individuals' decisions about their attempts to increase vocabulary size are likely to depend on their needs and beliefs about the kind of words which must be learned. In addition, students' interest and motivation play a crucial role in this matter (Hatch & Brown 1995). Richards (1976: 84) claims that "a learner who is constantly adding to his vocabulary knowledge is better prepared both for productive and receptive language skills". Schouten-van Parreren (1995) also argues that words which students themselves choose to learn will be better integrated in the memory.

Now that the vocabulary learning strategy classification adopted in this study and its seven categories have been described, the following sections are devoted to discussing the four research areas of the present study.

4.3 The Relationship between Vocabulary Strategy Use and Success

Learning strategies have recently become recognised as a major factor in language learning success (Wenden & Rubin 1987; O'Malley & Chamot 1990). Several models of mental processes and of second language acquisition (McLaughlin 1987; MacIntyre 1994) propose that learning strategies appear to constitute one of the most important differences among individuals in L2 acquisition. However, it has been noticed that the relationship between strategy use and proficiency is very
complicated, since strategy use does not bear a simple linear relationship to achievement in a second language (McDonough 1999), and because the use of "particular strategies might lead to proficiency, but proficiency might lead to use (or abandonment) of particular strategies" (Green & Oxford 1995: 293).

In spite of such considerations, this relationship has been the focus of a growing body of research over the last twenty years. The findings of many studies (Politzer & McGroarty 1985; Ahmed 1989; Kojic-Sabo & Lightbown 1999) suggest a strong relationship between the amount and type of strategy use and levels of success in language learning. However, the evidence of this relationship may not be conclusive, and may need to be substantiated further (see section 3.3 in Chapter Three). Consequently and as pointed out before (1.4), the first main purpose of this study of vocabulary learning strategies used by AFL learners in Saudi Arabia is to explore the relationship between vocabulary strategy use and success.

In strategy research, the relationship between learning strategies and success in language learning is usually considered with reference to the concept of the good language learner (e.g. Naiman et al. 1978; Rubin 1981; Ahmed 1989) or by cross-sectional studies which attempt to identify the correlations between strategy use and achievement (e.g. Politzer 1983; Politzer & McGroarty 1985; Ramirez 1986; Lawson & Hogben 1996; Erten 1998). In the present study, the first approach has been chosen to investigate the issue of the relationship between vocabulary strategy use and success.

4.3.1 Good and poor language learners

There are three main approaches to conducting strategy studies related to the concept of the good language learner. The first focuses on the "good language learner" (Stern 1975; Papalia & Zampogna 1977; Naiman et al. 1978; Rubin 1975, 1981; Reiss 1985; Gillette 1987) in order that a profile of successful learner behaviours might be identified and subsequently used as the basis for training poor learners, on the assumption that poor learners lack these strategies. These studies of the "good learner" have provided some of the richest insights into the kinds of behaviours associated with successful language learning (Ellis 1994). However, the assumption that the poor learner lacks the good learner's strategies has been criticised (Vann &
Abraham 1990) on the grounds that not all poor learners lack all these strategies. Moreover, some poor students may even be similar to successful learners in their repertoire of strategies, and the difference between the two groups of learners may lie in when and how appropriately a particular strategy is used. In addition, it has been noted (Abraham & Vann 1987) that the limited success of learner training might be due to insufficient information about the strategies adopted by unsuccessful learners.

The second approach is to study the strategies used by ‘poor’ language learners (Porte 1988; Vann & Abraham 1990), and the third approach is to compare the different strategies used by ‘good and ‘poor’ language learners (Hosenfeld 1977; Wesche 1979; Abraham & Vann 1987; Ahmed 1989). Although differentiating between good and poor learners by examining their strategies has been criticised (Williams & Burden 1997), some studies (e.g. Ahmed 1989; Gu 1994) were able to demonstrate that it was possible to distinguish students as poor or good language learners according to their strategy use. McGroarty and Oxford (1990) argue that the appropriate learning strategies used by good language learners help to explain their performance and the inappropriate learning strategies used by poor students aid in understanding their frequent failure. In addition, the strategy literature assumes that some of the success in language learning “can be attributed to particular sets of cognitive and metacognitive behaviors which learners engage in” (Rubin 1987: 15). Success, then, can be partly explained by discovering what ‘good’ learners do that ‘poor’ learners do not. This trend of comparing good and poor learners should, therefore, be continued if we want to arrive at a clearer picture of the effective use of learning strategies. The present study on vocabulary learning strategies of AFL learners is, therefore, based on the notion that successful language learners can be differentiated from less successful ones by the strategies they employ to learn vocabulary.

Furthermore, these studies comparing the two groups of learners have demonstrated that successful language learners use a larger quantity and wider variety of strategies than their unsuccessful counterparts. However, many researchers (Ahmed 1989; Green & Oxford 1995) complain that most studies comparing strategy use by different groups have tended to pay attention to overall strategy use or to the use of broad categories rather than to differences in the use of individual strategies. It has
also been suggested (Kojic-Sabo & Lightbown 1999) that the quality, rather than the sheer quantity, of strategy use determines success for particular learners in specific situations, and how strategies are used is probably as important as which ones are used (Nisbet & Shucksmith 1986). The secret of successful language learning may, therefore, lie in the appropriate use of strategies in relation to individuals’ specific needs in different circumstances. The following quotations illustrate clearly the complexity of strategy use effectiveness:

The total number or variety of strategies employed and the frequency with which any given strategy is used are not necessarily indicators of how successful (p8) they will be on a language task. Whereas the successful completion of some tasks may require the use of a variety of strategies used repeatedly, the successful completion of others may depend on the use of just a few strategies, each used only once but successfully (p9). The effectiveness of a strategy may depend largely on the characteristics of the given learner, the given language structure(s), the given context, or the interaction of these (Cohen 1998: 12).

The general assumption that effective strategy use involves frequent strategy use is also questionable. It is likely that it is not so much how often learners use strategies as when and with what purpose they use them. It is also likely that strategies will prove most helpful when they are deployed in clusters (Ellis 1994: 559).

Using more varieties of strategies and using them more frequently may not necessarily guarantee success in language learning. How one uses a strategy may be just as important, or even more important, to learning than the number of strategies one employs (Gu 1994: 3).

This study, therefore, adopted a ‘multiple cases’ (qualitative) approach to explore the above-mentioned area (5.2). This approach has the strength of capturing in depth the uniqueness and individuality of particular individuals. So, the relationship between using certain strategies and success in vocabulary learning has been explored in this study by examining in detail (through studies of ten learners of Arabic using interviews and diaries) what the successful learners do when learning Arabic vocabulary in and out of class, and if and how they differ from the less successful ones. The less successful students in this study are defined as students who have a certain degree of success in learning Arabic, but they are not as successful as the successful students (see 5.5.3). The comparison between the two groups of learners has been carried out by examining their strategies in relation to the seven aspects of vocabulary learning adopted in this study: (1) non-dictionary strategies for discovering the meanings of new words, (2) dictionary use, (3) note-taking, (4) memorizing new lexical items, (5) practising newly learnt words, (6) planning and evaluating the process of vocabulary learning (metacognitive strategies), and (7)
expanding lexical knowledge. As a result, the first main research question in this study is:

**RQ1** What are the vocabulary learning strategies employed by the successful and less successful learners of Arabic as a Foreign Language (AFL) in the study?

This question has several sub-questions pertaining to the seven aspects of vocabulary learning developed for the purpose of this study:

1. How do the successful and less successful learners differ in using non-dictionary strategies for discovering the meanings of new words?
2. How do they differ in using dictionaries?
3. How do they differ in note-taking?
4. How do they differ in memorizing newly learnt words?
5. How do they differ in practising newly learnt words?
6. How do they differ in planning, organizing and evaluating their learning?
7. How do they differ in expanding their lexical knowledge?

### 4.4 Factors Affecting the Choice and Use of Vocabulary Learning Strategies

As mentioned previously (1.4), the second main purpose of the present study is to investigate the relationship between a group of factors relevant to the TAFL context in Saudi Arabia and the use of vocabulary learning strategies by AFL learners through the survey of a much larger sample. This section, therefore, will discuss the various factors that have been examined in this study in relation to vocabulary strategy use. From our review of vocabulary strategy research in the previous chapter (section 3.3), it appears that there exists evidence to suggest that a number of individual differences and particular factors seem to be related to vocabulary strategy use and choice.

Moreover, research on language learning strategies in general has shown that a whole range of variables has to be borne in mind when assessing learners' strategies. Oxford (1989 & 1993) and Oxford and Crookall (1989) listed several factors associated with strategy use, including the language being learned, age, sex, duration, degree of awareness, attitudes, motivation level, language learning goals, motivational orientation, personality characteristics, learning style, aptitude, career orientation, national origin, language teaching methods, and task requirements. Nyikos and Oxford (1993) argue that the strategies learners choose and apply to foreign language learning depend on the interaction of situational factors which are
external to the learner with a host of learner variables. In reflecting on the mediating role of strategies in the process of language learning, Ellis (1994) suggests that individual learner differences, together with social and situational factors, affect the learner’s choice and use of learning strategies as can be seen in Figure 4.4 below.

![Figure 4.4 Ellis' Model of L2 acquisition](image)

As a result, certain individual factors (the student’s native language, proficiency level and level of achievement), situational factors (course type and the variety of Arabic used out of class) and a social factor (religious identity) have been taken into account in the present study in order to find out how these variables affect vocabulary strategy use. These factors will be considered in the following sub-sections.

4.4.1 Individual factors
4.4.1.1 Students' first language
Inasmuch as it is believed that the mother tongue has a major influence on the way second language vocabulary is learnt and used (Swan 1997), it is possible that it may affect which strategies students adopt to learn a foreign vocabulary. Many language teachers and researchers also believe that any similarities and dissimilarities in word forms and meanings may play a considerable role in how quickly and efficiently a particular foreign language is learnt by speakers of other languages (Odlin 1989). So, language distance has an effect on vocabulary learning (Swan 1997), but does language distance also have an effect on learning strategies?
Meara (1993) suggests that lexical concordance between the first language and the target language will affect language learners’ strategy choice. He claims that learners whose mother tongue does not have lexical similarities are less likely to look for cognates in the target language. This view was confirmed by Schmitt’s (1997a) study with Japanese students learning English (3.3.18). Another piece of supporting evidence comes from Erten (1998), who found that lexical and phonological similarities between the mother tongue of language learners and the foreign language they study facilitate the use of certain strategies. His findings suggest that phonological similarities may trigger the use of sound associations (3.3.20).

In the present study, I have looked at the similarities and dissimilarities in the script, and their effect on the vocabulary learning strategies students employ to learn Arabic lexical items. Green and Meara (1987: 112) argue that “the writing system of a person’s first language may have profound and long lasting effects on the way L2 material is processed”. Oxford and Crookall (1989) also allude to the probability of differences in patterns of strategy use according to the orthography of different languages. One hypothesis held currently is that the L1 orthographic background of learners will be a determinant of how they learn and process an L2 orthography (Koda 1994). Koda (1997) explores the effect of orthographic differences between L1 and L2, and argues that these differences can lead to different reading strategies. The question is whether the L1 orthographic background of a student has an effect on their vocabulary learning strategies. This study has, therefore, attempted to investigate the vocabulary learning strategies adopted by students whose first languages have a similar script to that of Arabic, and also the strategies used by students whose first languages have a different script. The aim, then, is to find out whether there are any differences in vocabulary strategy use between these two groups of learners, a question which has not been addressed in previous research. It must be noted that this factor (students’ first languages) is not entirely an individual factor. However, I have classified it as such because it is a background (linguistic) factor, which may fit into this group more pertinently than into situational or social factors.
4.4.1.2 Proficiency level

The second individual factor is students' proficiency level. Language proficiency is often operationalised by course level (beginning, intermediate, advanced) and number of years of language study (Politzer 1983; Prokop 1989; O'Malley & Chamot 1990). Studies suggest a relationship between students' language proficiency and their use of learning strategies. Bialystok (1981) found that differences in strategy use occurred as learners advanced in French. Formal practice with rules and forms was less in use and less effective as students advanced, but functional practice with authentic, communicative language displayed no such limitation. Politzer (1983) also discovered that higher-level foreign language students used more positive strategies. In their study of language learning strategies, O'Malley et al. (1985b) reported that intermediate learners used metacognitive strategies, such as monitoring, more frequently than beginners. With regard to cognitive strategies, the authors reported that the two most frequent strategies used by both groups of students were repetition and note-taking and that both strategies were used equally frequently by both groups. However, translation, elaboration and imagery tended to be used more by beginners while contextualisation tended to be used more by intermediate learners.

In another study, Chamot and her colleagues (Chamot et al. 1987) found that cognitive strategy use decreased and metacognitive strategy use rose as the foreign language course level increased, but social-affective strategy use remained very low across all course levels. In general, they found that EFL students of a higher level of proficiency reported using more strategies than did beginning-level students. Moreover, Oxford and Nyikos (1989) found that students who had studied a foreign language for more than four years used "communication-oriented strategies" more often than less experienced students.

With specific reference to vocabulary learning strategies, Cohen and Aphek (1980) found that beginners mostly used sound associations while advanced learners used structural associations, and that while word lists proved more effective among beginners, more advanced students benefited more from contextualized words (3.3.3). Cohen and Aphek (1981) and Cohen (1987), therefore, argue that the more words individuals know in the target language, the more likely they are to use this
information to form new associations. This view was supported by Erten’s (1998) finding that advanced students had a wider range of strategies in their repertoires than intermediate students and that they used more strategies. Erten concludes that advanced students use their superior linguistic knowledge to use more analytic vocabulary learning strategies (3.3.20). Jones (1995) also observed that the more proficient he became in Hungarian, the wider was the range of strategies he could use (3.3.13). Al-Qarni (1997) also found that advanced learners employed a greater variety of strategies than did learners at low proficiency levels (3.3.19). By contrast, Stoffer’s (1995) and Payne’s (1988) studies reported more frequent use of vocabulary learning strategies by beginner language learners (3.3.14 & 3.3.6).

Whatever the case might be, the above studies suggest a link between learners’ proficiency level and their use of learning strategies. The present study has, therefore, looked at the vocabulary learning strategies used by students at different levels of Arabic proficiency (first, second, third and fourth levels) as one of the individual factors examined. The students in the four levels (morning course) were divided into two groups: those at the first and second levels were placed in the low-proficiency group, while those at the third and fourth levels formed the high-proficiency group. As for the evening course, students in the elementary and intermediate levels were placed in the low-proficiency group, and those at the advanced level placed in the high-proficiency group.

4.4.1.3 Level of achievement
The third individual factor is students’ achievement level within their proficiency level. The literature on both general language learning strategies (Tyacke & Mendelsohn 1986; Oxford & Crookall 1989; Chamot & Kupper 1989; Embi 1996; Kayaoglu 1997) and vocabulary learning strategies (see section 3.3 in the previous chapter) suggests that high achievers have a greater repertoire of strategies and use them more frequently and effectively than low achievers. This factor has been examined in the survey in order to compare the result of the survey regarding this factor with the result of the multiple cases, since the major purpose of the multiple cases is to investigate this issue (see section 4.3). A further purpose of this comparison is to see which approach (the multiple cases or the survey) is more
suitable for investigating the relationship between success and vocabulary strategy use.

4.4.2 Situational factors

4.4.2.1 Course type

The first situational factor that has been taken into consideration in this study is course type (morning-course students and evening-course students). Oxford and Nyikos (1989) found that course status (in their study: elective vs. required) has an effect on students’ strategy use, and they found also that this variable is related to motivation. They found that students who elected to learn the language rather than taking it as a graduation requirement used some strategies more often. They found also that, among university students, the most commonly used strategies were those considered most appropriate to traditional classrooms and discrete-point testing as opposed to those used for independent communication. With specific reference to vocabulary learning, Scholfield and Gitsaki (1996) found that there are differences between private and public institutions in terms of the vocabulary learning strategies students use. Nakamura (2000) also found significant differences between Japanese students learning English in Japan and Japanese students learning English in England in their use of word attack, note-taking, repetition and memorization strategies.

In the context of the present study, it is assumed that this variable may have an impact on the use of vocabulary learning strategies, since there are differences between the two courses that held at ITANA (morning and evening) in terms of students’ learning goals and motivation (2.2.2.1 & 2.2.2.2). Oxford and Nyikos (1989) found that motivation is a key factor in strategy use, and Politzer and McGroarty (1985) suggested that learners’ goals are likely to determine strategy use.

Course type is, in the context of the present study, also related to students’ current careers. All morning-course learners are students who came to Saudi Arabia only to study Arabic. They are also expected to follow their higher studies at Arab universities. By contrast, evening-course students are professionals who already have degrees in various subjects and are at work in the morning; they attend evening classes out of interest. Consequently, there are differences between the two groups of students in their current career positions and their career orientations, factors which
appear from strategy research (Politzer & McGroarty 1985; Ehrman & Oxford 1989; Oxford & Nyikos 1989) to influence foreign language learning strategy choice. Moreover, the two groups of learners may differ in their backgrounds - their past experience and current career- and it has been suggested that there is a link between personal background and strategy use (Ehrman 1990). This study, therefore, has examined the differences between morning-course students (full-time students) and evening-course students (part-time) in their use of vocabulary learning strategies.

4.4.2.2 Variety of Arabic used out of class
The second situational factor which has been investigated in the present study is the variety of Arabic (Standard vs. Colloquial) which is used outside the classroom. There are two varieties that students are exposed to: Standard Arabic, which students learn in class at ITANA, and the Colloquial Arabic that students hear outside class (2.3.1). Despite the neglect of the colloquial variety in the course, some learners of Arabic appear to attempt to use the colloquial variety outside the classroom (see Aboheimed 1991). The question is whether the students' use of vocabulary learning strategies varies according to this factor. Do students who use the Standard variety employ different strategies from those who use the Colloquial dialect? The importance of this factor lies in the view that the goals that learners set for learning the target language will affect the way vocabulary is selected (Nation 1990). According to this view, if the goal of a learner is to learn the Colloquial variety of Arabic, this will affect the type of vocabulary he will select to learn, which in turn will affect the sources from which he will choose items. Consequently, such a learner might employ different strategies from one whose goal is to learn Standard Arabic. However, a third category has been added here to cover students who do not use Arabic at all outside the class. It is worth mentioning that it was expected to find relatively equal size of students in each group (see Chapter Seven).

4.4.3 Social factor
4.4.3.1 Religious identity
The final factor that has been included in this study is religious identity. Although it can be classified as a socio-cultural factor, I term it a social variable for the purpose of this study according to the categorisation I am using. It has been noted that, despite their importance in strategy use, comparatively little attention has been given
in strategy research to the role of social factors (Ellis 1994). According to Schmitt (1997a), culture is also a very important learner characteristic in vocabulary learning. Politzer and McGroarty (1985) studied the strategy use of Asian and Hispanic learners of English. Their findings revealed that Spanish speaking students reported more frequent use of 51 strategies included in the self-report questionnaire. Since religious identity involves both aspects (social and cultural), it may have an impact on the use of vocabulary learning strategies, particularly in the case of Arabic, where there are two groups of learners: Muslims and non-Muslims. These two groups have different attitudes towards Arabic and its culture. For Muslim students, Arabic is the language of the Quran, which they are obliged to learn; it is greatly valued and learning it is a duty. On the other hand, non-Muslim learners have a different attitude towards Arabic and different learning objectives. The question, then, is whether the use of vocabulary learning strategies varies with the factor of religious identity. Do Muslim learners employ different strategies from non-Muslims? It was also expected to find rather equal number of students in each group (see Chapter Seven).

This study’s second main research question, which has been addressed in the survey, is:

RQ2 Does the use of vocabulary learning strategies vary significantly according to the following factors?

1. **Individual factors**: students’ first language, proficiency level and level of achievement,
2. **Situational factors**: course type and the variety of Arabic used out of class,
3. **Social factor**: religious identity.

Following this discussion of the individual, situational and social factors which have been investigated in this study through the survey that has been administered to the whole population, in the following two sections I will consider the issues of in-class and out-of-class vocabulary learning strategies and of dealing with diglossia.

4.5 In-Class and Out-of-Class Vocabulary Learning Strategies

Although many out-of-class vocabulary learning strategies have been identified, no research reviewed in the previous chapter (section 3.3) has tried to investigate what
students do in the classroom to learn foreign vocabulary. Seliger (1984) hypothesizes that the different demands of the language learning environment inside and outside the classroom are likely to cause some variation in strategy employment. Consequently, the present study has attempted to identify the vocabulary learning strategies employed by AFL students in the classroom as well as those used outside the classroom. The importance of including both types lies in the view that some scholars believe that most vocabulary learning takes place outside the classroom (Graves 1987). However, there is no empirical evidence with respect to this issue in the research literature on vocabulary learning strategies. This is because our knowledge about learners' behaviours in the classroom is insufficient. In addition, because in the TAFL context many vocabulary items are usually taught explicitly in each lesson, it is likely that students employ several strategies to deal with such words in class. The results obtained from this study will therefore provide initial evidence regarding this issue.

4.6 Dealing with Diglossia

Diglossia is an important feature of Arabic (2.3.1), and students may resort to special strategies to deal with this phenomenon. As mentioned previously (1.2.6), Meara (1996) has pointed out that some languages present particular learning problems to L2 learners and, in the case of Arabic, diglossia is a problem which foreign learners have to deal with. A study by Aboheimed (1991) investigated students' perceptions of diglossia in Saudi Arabia. The aim of the study was to explore students' attitudes towards this phenomenon and what type of Arabic (Standard vs. Colloquial) they use in their daily lives. However, how students themselves deal with the situation remains little understood. The significance of this issue lies in the fact that only Standard Arabic is taught in Saudi Arabia, and the matter of the spoken variety of Arabic is left to the students' own initiative. During my experience as a teacher at ITANA, I have noticed that, despite the neglect of the spoken form in the teaching programme, some students display the ability to grasp the Saudi dialect; it is therefore worthwhile investigating how students cope with the situation. This study, therefore, will investigate the learning strategies students employ to deal with diglossia with respect to vocabulary learning. The question is, therefore, whether
learners of Arabic employ particular strategies to cope with this problem. The third main research question in this study is:

**RQ3** Do students adopt specific strategies to cope with the problem of diglossia?

4.7 The Three Research Questions

The questions addressed in this research are now restated as follows:

**RQ1** What are the vocabulary learning strategies employed by the successful and less successful learners of Arabic as a Foreign Language (AFL) in the study?

1. How do the successful and less successful learners differ in using non-dictionary strategies for discovering the meanings of new words?
2. How do they differ in using dictionaries?
3. How do they differ in note-taking?
4. How do they differ in memorizing newly learnt words?
5. How do they differ in practising newly learnt words?
6. How do they differ in planning, organizing and evaluating their learning?
7. How do they differ in expanding their lexical knowledge?

**RQ2** Does the use of vocabulary learning strategies vary significantly according to the following factors?

1. **Individual factors**: students’ first language, proficiency level and level of achievement,
2. **Situational factors**: course type and the variety of Arabic used out of class,
3. **Social factor**: religious identity.

**RQ3** Do students adopt specific strategies to cope with the problem of diglossia?

4.8 Chapter Summary

This chapter has discussed the research issues of the present study of vocabulary learning strategy use by AFL learners in Saudi Arabia. It has described the vocabulary learning strategy classification, which consists of seven main categories, developed as a general framework for this study. Then, four main aspects (vocabulary strategy use and success, factors affecting vocabulary strategy use, in-class and out-of-class vocabulary learning strategies, and dealing with diglossia) have been considered as the research areas for this study.

It has been argued that it is possible to distinguish students as good or poor language learners according to their strategy use, and that the multiple cases approach is an
appropriate methodology for investigating this issue. The chapter also discussed the individual, situational and social factors that have been examined in the survey part of this study. Finally, the chapter presented the main research questions and sub-questions of this study.

The research issues of this study having been considered, the next chapter will explain how these issues have been dealt with.
Chapter Five

METHODOLOGY

5.1 Introduction

This chapter is devoted to describing in detail the methodology pursued in the present study. In doing so, an attempt will be made to justify the combination of qualitative (the multiple cases) and quantitative (the survey) research approaches adopted, and present the rationale for employing multiple data collection methods in this study. Some methodological issues will then be discussed. Finally, the methodology of the study, which involves two parts, multiple cases and a survey, will be described in detail.

5.2 Combination of Multiple Cases (Qualitative) & Survey (Quantitative)

There are two main types of educational research: qualitative and quantitative (Nunan 1992). Qualitative research aims to broaden the scope of understanding of phenomena by employing more naturalistic and less structured data collection procedures. It aims to explore and describe constructs by collecting rich and in-depth data, taking full account of individuals. Qualitative research, therefore, tends to be closely associated with relatively open and less structured strategies for data collection, such as the use of participant observation and in-depth interviews, in order to generate a detailed account of human behaviour (Larsen-Freeman & Long 1991).

Quantitative research, on the other hand, assumes a stable reality and thus seeks causal relationships between different constructs through controlled and objective instruments, with little emphasis on the individual’s state of mind. This type of research is, therefore, closely associated with survey or experimental data collection procedures by which a specified causal connection can be verified or rejected (Larsen-Freeman & Long 1991). Despite the distinction between the two approaches, many researchers employ a combination of both. Strauss and Corbin (1990) view qualitative and quantitative research methods as complementary.
As far as the present study is concerned, both qualitative and quantitative research approaches were employed; multiple cases and a survey were incorporated into the research design (Robson 1993). The methodological design was shaped by the nature of the research questions and by the scope and aims of the study. To investigate the relationship between vocabulary strategy use and success, this study adopted a 'multiple cases' approach which involves the gathering of in-depth qualitative data from a small number of students. For the second purpose of the study, that is, examining the relationship between certain factors and the use of vocabulary learning strategies, the survey was selected as the most appropriate approach because of its capacity to generate quantifiable data from large groups of students.

5.3 Combining Approaches

Since some language learning strategies are generally internal or mentalistic processes, designing a study to assess strategy use accurately is a challenge. However, progress has been made in the exploration and development of research techniques for investigating learners' strategies, and researchers in the field of learning strategies have utilised numerous assessment methods to determine patterns of strategy use among learners (O'Malley & Chamot 1990; Oxford 1990; Cohen & Scott 1996; Cohen 1998). These methods can be broadly categorised as observation techniques and verbal reports. In this study, various data-gathering techniques have been employed. It is recommended in learning strategy research (Oxford & Crookall 1989; O'Malley & Chamot 1990) that multiple approaches be adopted in data collection procedures, because each method might lead to different findings.

Researchers should, whenever possible, use multiple methods (qualitative and quantitative) for gathering and validating LLS data. For example, they can employ a survey combined with interviews or think-aloud procedures. (Oxford & Crookall 1989: 414)

In essence, considering a panoply of assessment measures and possibly adopting more than one in any given strategies study would allow for greater rigor than if only one approach is used. (Cohen 1998: 61)

[a multiple approach is] strongly encouraged, if we are to obtain more accurate, valid data on learners' cognitive processes as well as compensate for the problems inherent in each method. (Matsumoto 1993: 46)

Following these writers, and because "no single assessment method prevails in the field" (Cohen 1998: 13), I have decided to triangulate the data for this study by using
three of the most successful methods in strategy research, namely, questionnaires, interviews, and diary-keeping:

The three major techniques for eliciting retrospective verbal reports have been successfully utilized in L2 research, especially in recent studies of the past decade: they are questionnaires, interviews, and diary-keeping. (Matsumoto 1993: 35)

Matsumoto (1993, 1994) identifies four different methods of data triangulation. These are (a) a combination of concurrent and retrospective self-report data, (b) a combination of retrospective verbal-report data from different sources, (c) a combination of verbal-report data with performance data, and (d) a combination of verbal-report data with researcher observation. The methodology of the present study can be categorised in the second group, as retrospective verbal-report data from different sources (interview, diary and questionnaire) were obtained.

5.4 Methodological Issues

Before going on to describe in detail the three instruments within the two elements of this study (the multiple cases and the survey), it may be fitting to take account of the following issues concerning the methodology of this study (cf. O’Malley & Chamot 1990), some of which can be considered as advantages or as limitations.

5.4.1 Purpose of data collection

The purpose of data collection varies from one study to another: it may be to obtain information on all types of strategies; to focus on one specific category of strategy (metacognitive, cognitive, memory); or to focus on a specific strategy (O’Malley & Chamot 1990). In this study, the intention of the data collection was to obtain information on all types of vocabulary learning strategies. By using the survey (5.8), the broadest range of coverage and general trends for vocabulary strategy use can be obtained, whereas through the multiple cases (5.5), using interviews and diaries, the narrowest range of vocabulary strategy use coverage and in-depth information can be achieved.

5.4.2 Temporal relationship

The temporal relationship between strategy use and data collection is a critical determinant of the type of information that can be expected (O’Malley & Chamot 1990). This is because the rate of forgetting rises and the rate of specificity may
decline quickly with the passage of time (Rubin 1981). Ericsson and Simon (1987, 1993) and Matsumoto (1994) make a distinction between concurrent and retrospective verbal reports. The data collection methods employed in this study are all retrospective, although Cohen (1984) claims that data from introspection may be somewhat more complete and accurate than data from retrospection. Faerch and Kasper (1987) further distinguish two types of retrospective verbal reports, namely, immediate retrospection and delayed retrospection. Data from immediate retrospection might be rather more complete and accurate than that from delayed retrospection as Cohen (1984) also suggests. In this study, the interview represents immediate retrospection since it was conducted immediately after a lesson attended by both the interviewer and the interviewee (5.5.2). The questionnaire, on the other hand, is a delayed retrospection since it was not completed immediately after a task (5.8). Regarding diaries, they can represent either immediate or delayed retrospection, since the behaviours reported in them could be documented either soon or some time after applying the strategy (5.5.1).

5.4.3 Language of data collection
One aspect of the elicitation procedure that has an important influence on data collection is the language used for the collection. The usual approach in studies of strategy research has been to permit respondents to use their native language in describing their strategies (O'Malley & Chamot 1990). In the present study, the language employed for the data collection was Arabic (the target language), due to the fact that the sample participating in the study was made up of learners from different first-language backgrounds. This point was also one of the main reasons that prevented the researcher from using think-aloud protocols, since the language normally used in such methods (think-aloud) is the students' native language (Anderson & Vandergrift 1996). However, it should be noted that, as an alternative, students were allowed to complete the questionnaire in English. Reporting on learning strategies through the target language (Arabic) is one of the limitations of the present methodology, as using Arabic may have led to verbalisation difficulties and hence to the masking out of some important information (Matsumoto 1994). To alleviate this problem, I chose the participants of the multiple cases from the high-proficiency levels (5.5.3). O'Malley et al. (1985b) interviewed their intermediate-level subjects (non-native English speakers) in English and were able to identify a
The degree of structure given to the instrument also has a strong impact on data collection. The degree of structure refers to "the extent to which the researcher controls the form and content of the informant's [reporting]" (Matsumoto 1993:43). When the instrument has a high degree of structure, it may strongly influence the content of an informant's report. In this case, the researcher has complete control over the questioning and the data obtained is uniformly organised for all respondents (Cohen 1998). However, the respondent usually does not have an opportunity to elaborate on the answers and consequently such highly-structured instruments fail to provide the depth of information yielded by less structured instruments (O'Malley & Chamot 1990). On the other hand, when the instrument has a low degree of structure, it is likely to have little influence on the content. The advantage of using unstructured instruments is that they allow the researcher and respondents to pursue topics of interest which may not have been foreseen when the questions were originally drawn up (Cohen 1998); the disadvantage is that the volume of data is increased and the data itself are likely to be more highly individualised, thus preventing the researcher from determining overall patterns and from classifying strategies accurately (O'Malley & Chamot 1990). As will be shown later in this chapter (5.5.1.1, 5.5.2.1 & 5.8.2), the three instruments used in this study had different degrees of structure. On the one hand, the questionnaire was highly structured because it consisted of questions which were predetermined by the researcher, whereas the diaries had the lowest degree of structure because they left open the nature of the strategies that are reported and the specific task involved. Finally, the interview had a medium degree of structure because, although the researcher had a list of general questions and areas he intended to investigate during the interview, the procedure used left open the nature of the strategies that were reported.

5.4.5 Mode of elicitation
The mode of elicitation and response is one of the major factors which characterise the data obtained from verbal reports (Cohen 1984). The information elicited may be
gathered orally or in writing. The three instruments employed in the current research represent the two modes of language. As Cohen (1998) points out, differences may exist between spoken and written verbal reports (5.5).

5.4.6 Participants' training
Most data collection techniques for investigating learning strategies do not require the prior training of informants and indeed the participants in this study did not need to be trained to take part in the interviews or to complete the questionnaire. On the other hand, keeping the diaries required prior training of the participants. Rubin (1981) points out that subjects need to be trained to report on their strategies, adding that without instruction, students may give insufficient detail. The aim of the training is to show the learners how to select and report their behaviours and to familiarise them with the data collection procedures (O'Malley & Chamot 1990). However, although training participants is desirable and important, this training should be provided without researcher contamination (5.5.1.2). Cohen (1984: 105) refers to this issue as the degree of external intervention; it is "the extent to which the investigator shapes the respondent's reporting process". In this study, diary reporting may have been shaped by the written instructions (see Appendix 1), and by the brief training given to the participant (5.5.1.2).

5.4.7 Accurate strategy description
Most strategy assessment techniques involve some type of learner self-reporting (Oxford & Burry-Stock 1995). All the data collection methods employed in this study involved retrospective self-report. One of the main problems with such self-reporting is that students may be unaware of when and how they are using a given strategy. They may also overestimate or underestimate the frequency of use of certain strategies (Cohen 1998). To reduce the effect of this problem, certain procedures were incorporated in this study. First, the interview was conducted immediately after a lesson attended by both the researcher and the participant. Although the questions asked were not limited to that particular lesson, this procedure probably helped to remind the student about some aspects of his strategy use. Second, an interview was conducted with each participant at the time of collecting his diary in order to obtain more information about the diary reports. Third, instead of vocabulary learning strategies being considered as a whole when
collecting data, they were broken down into seven categories (4.2), and students were asked about each category in detail. Nevertheless, there could be no guarantee that learners would be able to describe all aspects of their use of learning strategies, and “[t]he magic ingredient in their L2 learning may be something they are quite unaware of” (Cook 1996: 105).

In the following sections, the two parts of the study (the multiple cases and the survey), the three instruments (interviews, diaries, and the questionnaire) used within the two parts, and the data collection procedures employed in this study are described in more detail.

5.5 The Multiple Cases
The first part of this study consisted of studies involving ten AFL learners. The purpose of these multiple cases was to identify the vocabulary learning strategies used by some successful and less successful learners of Arabic. Two instruments were used in the multiple cases: diaries and interviews. The reason for employing two instruments for the same purpose was to enable the researcher to identify as many strategies as possible used by the participants. In addition, since the interviews were conducted immediately after certain lessons, whilst the diaries were given to the participants to document their strategies at home, it was hoped that most in-class and out-of-class vocabulary learning strategies would be identified. In this regard, the present study is unique in that it had access to each learner’s in- and out-of-class strategies (4.5). Furthermore, the use of the two instruments offered each participant the opportunity to report on his own strategies both orally and in writing, thereby overcoming some of the limitations of each medium in describing behaviours (5.4.5). McDonough (1994) argues that it is difficult to draw any conclusions about students’ use of strategies by using only diaries, and consequently she suggests employing other instruments along with diaries.

5.5.1 Diaries
Diaries, which are a form of retrospective self-report, are becoming increasingly popular tools for gathering information about teaching and learning (Bailey & Ochsner 1983; Oxford et al. 1996). They can be effective means of allowing learners
to describe their feelings, thoughts and learning strategies. As has been shown, only two studies on vocabulary learning strategies (see Table 3.2) have made use of this instrument: Sanaoui's study (1992) and that of Jones (1995). Rubin (1981) found directed diary reporting an extremely useful way to obtain data about learning strategies. She further states that diary-keeping seems to be more productive when focusing on particular aspects of learning than when trying to cover the whole process. According to this view, it may be advantageous to use diaries when investigating one type of learning strategy, as this study has done by focusing only on vocabulary learning strategies. According to McGroarty and Oxford (1990), learner diaries have the potential for capturing the ongoing process of strategy adoption in language learning over weeks, months, or even years. The longitudinal and highly individual aspect of these studies makes them particularly helpful for gaining an appreciation of the variety of individual approaches that learners find useful depending on situation and proficiency level. (p60)

However, language learning diaries have been criticised (Oxford & Burry-Stock 1995) because their open-ended nature does not allow direct comparison between students.

5.5.1.1 The design of the instrument

In this study, use was made of Sanaoui's diary design (1992), according to which each student was given a chart divided into seven sections for the seven days of the week. Each participant was asked to write down in each section only what he did each day in order to learn vocabulary (see Appendix 1). Instructions were included in the chart to let students know what was required of them. The attempt was made to make the instructions clear and specific, since participants were asked to focus on particular aspects of vocabulary learning, and some examples were included in the instructions to help them (5.4.6).

5.5.1.2 Data collection procedures

The participants were given a chart (see Appendix 1) and asked to monitor and report daily on the vocabulary learning strategies and activities they used and engaged in over a one week period both outside of the Institute and at home. This chart was given to each student at the beginning of the week (Saturday) and collected on the following Saturday. To avoid the problems of students’ including too much
information and of not knowing how and what to report, the researcher conducted a
training session to show the participant what he should report and how to report it.
The session consisted of the following stages. First, the researcher read the
instructions to the student. Second, a demonstration of how to write an entry was
given. Third, the researcher let the student read the instructions, then allowed him to
ask any questions he might have. It should be noted that care was taken when
providing learners with training, so as not to influence them unduly. Learners were
not given examples of other diaries as they might have been influenced by the
content of these diary entries presented as sample reports in practice sessions. In
addition, no details were given and the researcher did not discuss anything in depth,
so the training session did not take long (5.7.1.2), and thus the participants were
hopefully not overly influenced and contamination of the data was rather avoided
(5.4.6).

An interview was conducted by the researcher with each participant individually at
the time the chart was collected. The aim of this interview was to discuss what had
been written and to ask each participant to explain his strategy use further or to
elaborate on the notes he had made. Each interview was tape-recorded, and the
researcher planned also to take notes during the interview (see sub-section 5.6.5). As
mentioned before (5.4.3), the participants were asked to document their strategies in
Arabic and the interviews were also conducted in Arabic. The process of giving out
the diaries and collecting them from the participants was planned to be conducted
over five weeks: two students each week (see sub-sections 5.6.5 and 5.7.1.1). This
was done in order to distribute the work over a reasonable period of time, so as not to
put the researcher under pressure, which could have been detrimental to the data
collection. The researcher therefore conducted two interview sessions and had two
diaries to deal with each week.

5.5.2 Interviews
Interviews have been extensively used for eliciting language learning strategies
(Naiman et al. 1978; Wesche 1979; Wenden 1982; Porte 1988; LoCastro 1994;
Atherton 1995; Kayaoglu 1997; Berry 1998). They have provided the most detailed
information about learning strategies (Naiman et al. 1978; Wenden 1986a). They
allow the student to reflect on all phases of a learning task. Further, interviews can
provide in-depth information about the use of strategies with individual tasks (O’Malley & Chamot 1990). In interviews, informants are asked to describe verbally learning experiences that have occurred some time before (Cohen 1984). The aim of the interview is usually to allow the subjects to tell their own stories and to give their personal views in their own words so that the researcher can gain more insights and a clear understanding. While many interviews have taken the form of one-to-one conversation between the interviewer and the informant, others have been carried out in groups (LoCastro 1994; Atherton 1995). Three types of interviews are frequently employed. The first is the structured interview (Wesche 1979; Porte 1988), whose key feature is that it is mostly organised around a set of prearranged short and direct questions which require immediate, mostly ‘yes’ or ‘no’ type responses. The interviewer and interviewees, therefore, have very little freedom within the interview situation. The structured interview is very similar to the questionnaire in both its form and the assumptions underlying its use (Hitchcock & Hughes 1989). Second, the unstructured interview (Pearson 1988; LoCastro 1994), unlike the structured interview, is an open situation, which offers greater flexibility and freedom to both sides in terms of implementing the planning and organising the content and the questions.

Third, the semi-structured interview (Wenden 1982; Embi 1996; Kayaoglu 1997) may be considered a much more flexible version of the structured interview, since “it allows depth to be achieved by providing the opportunity on the part of the interviewer to probe and expand the interviewee’s responses” (Hitchcock & Hughes 1989: 83). When undertaking this type of interviewing, a basic checklist is prepared to make sure that all relevant areas are covered. Wenden (1982: 39) considers that the general interview guide approach is useful as it “allows for in-depth probing while permitting the interviewer to keep the interview within the parameters traced out by the aim of the study”. For the purpose of this study the semi-structured interview using open-ended questions was chosen.

Open-ended questions have a number of advantages; they are flexible; they allow the interviewer to probe so that she may go into more depth if she chooses, or to clear up any misunderstanding; they encourage cooperation and help establish rapport; and they allow the interviewer to make a truer assessment of what the respondent really believes. Open-ended situations can also result in unexpected or unanticipated answers which may suggest hitherto unthought-of relationships or hypotheses (Cohen & Manion 1994: 277).
On the other hand, the disadvantage of interviews is that students may not report their strategy use accurately or may forget to mention some strategies. Moreover, students may claim in interviews to use strategies that they do not in fact use (Chamot & Kupper 1989). Interviews have also been criticised (Oxford & Burry-Stock 1995) as being time-consuming in respect of both data collection and analysis because they need to be transcribed, coded and possibly translated as was the case in the present study.

5.5.2.1 The design of the instrument

The interview guide incorporated seven main questions representing the seven aspects of vocabulary learning adopted in this study (see section 4.2 in Chapter Four), each being supplemented by possible follow-up questions and prompts (see Appendix 5). The purpose of the probing was to give cues to the interviewee about the level of response that was desired, to deepen the responses to a question, and to increase the richness of the data being obtained. The aims of the questions prepared for the interview were as follows:

Q1. To elicit non-dictionary strategies used for discovering the meanings of new words.
Q2. To elicit dictionary-use strategies.
Q3. To elicit note-taking strategies.
Q4. To elicit memorization techniques.
Q5. To elicit practice strategies.
Q6. To elicit the strategies for planning, organizing and evaluating the learning process.
Q7. To elicit strategies used for expanding lexical knowledge.

It should be noted that the actual questions put to the interviewee did not always follow exactly the order of the questions as shown above. The questions only served as a guide for the discussions, and the order of questioning depended on the situation and how the discussion progressed during each interview (see section 4.2). Furthermore, each participant’s responses might lead to other questions being asked for elaboration or clarification. However, all the questions were put to all the participants in the same manner. In addition, through the interviews, the researcher tried to clarify and extend the meanings of the interviewees’ statements in order to
avoid misinterpretations on their part. Kvale (1996) suggests that researchers should use such procedures to allow the interviewees to confirm or disconfirm what has been interpreted by the researcher.

5.5.2.2 Data collection procedures

The interview with each participant was conducted individually, immediately after a lesson attended by both the researcher and the learner; the researcher entered the class and observed what was taking place there, making notes throughout the lesson. The researcher made sure by asking teachers that the lesson attended involved the introduction of new lexical items. Immediately after the lesson, the researcher conducted the interview with the learner. The researcher used the notes that he had taken to probe the strategies and to help the interviewee to remember which strategies had been used. By doing so, the researcher was able to guarantee to some extent that most of the student's in-class strategies were identified. However, it must be mentioned that classroom observation as it was employed in this study was not a separate instrument; rather, the observational data were used simply to jog the learner's memory regarding the classroom events during the lessons in question (Cohen 1998). The researcher did not specifically observe the learner; instead, he noted what was happening generally in the class in order to help him when asking questions and to use the events that had occurred to prompt the learner to remember any strategies or techniques which he may have used. It must be kept in mind that asking a participant about the strategies he has employed in the class was not limited to the particular lesson observed, but included his classroom vocabulary learning strategies in general. So, the notes taken from the lesson attended served as a guide for the interviewer to help the participant to remember his classroom strategies employed either in the lesson attended or in other lessons (not attended by the researcher).

No time limit was specified for each interview. The interview was audio-recorded using a normal recording device and subsequently transcribed. Each participant was informed that the discussion would be recorded. So, the researcher attended ten lessons which were immediately followed by ten interview sessions with the ten participants over a five-week period. It should also be mentioned that it was planned that the two participants asked to keep diaries during a particular week were the same
two participants who would be interviewed that week (see sub-section 5.6.5). So, the researcher would deal with the data (obtained from the diaries and interviews) of two participants each week.

5.5.3 Classification of students as “successful” and “less successful”

Ten students were asked to keep diaries and participate in interviews: of these ten learners, five were identified as “successful” and five “less successful”. Two criteria were used to assign successful and less successful learners: students’ exam results for the previous term and teachers’ judgement. A total of twenty students were selected as successful and less successful learners according to the grades they had obtained for the previous term (ten successful learners from those students who had obtained grade A and ten less successful learners from those who had obtained grade D). These grades were derived from students’ scores on several tests of various skills (e.g., reading, writing, speaking, grammar) which were then combined into a single grade. So the final grade was awarded on the basis of tests designed to determine students’ overall language ability. From these twenty, their teachers then selected five from each group who in their judgement represented the best five and the worst five in respect of their overall linguistic abilities. The benefit of this second selection process on the part of the teachers was twofold: it would help to guard against any possible errors in the grading process (for example, a grade A student who had a “lucky day”, but who would normally be expected to obtain grade B; or a grade D student who had a “bad day” or was sick but would normally merit a grade C); second, by choosing the “best” five and “worst” five from each group, the difference in the ability levels of each group should be further increased, thereby enhancing the purpose of the first selection process. Moreover, the students’ results in exams may not reflect their actual mastery of the language since TAFL exams focus on formal aspects of the language. The teachers’ judgements were expected more accurately to reflect the students’ ability in speaking and writing outside the classroom context.

Since a reasonable degree of proficiency in Arabic was needed if the participants were to respond in Arabic in both the diaries and the interviews (5.4.3), the participants were selected from the advanced levels (upper-intermediate and advanced levels). In addition, the participants were chosen from the morning programme (2.2.2.1). This is because in ITANA, morning students are typically
those learners of Arabic whose objectives the curriculum is designed to meet. These students also attend the Institute (ITANA) every day, so it is easy to arrange to meet them at any time. They also come to Saudi Arabia primarily to study Arabic rather than work and, therefore, have a considerable amount of free time after classes, which makes it more practical to ask them to keep diaries. Evening learners (2.2.2.2), on the other hand, come to Saudi Arabia primarily to work and not to study, so they spend a very limited time learning Arabic at the Institute and are busy with their work the rest of the time, which makes it difficult to ask them to keep diaries. In addition, in selecting the ten participants, attempts were made to choose them from different first-language backgrounds, in order to represent the whole sample.

When assigning students to the groups of successful and the less successful learners, the researcher conducted a separate meeting with each participant, whose teacher was planned to be present to encourage him to participate in the research (see subsection 5.6.3). At this meeting the researcher explained the purpose of the study and the procedures that would be followed during the study, in order to assess the extent of each learner’s enthusiasm about taking part in the research.

5.6 The Pilot Study

The two instruments that were used in the multiple cases were first piloted with four learners of Arabic at ITANA in January 1999. The procedures that were employed were the same as those outlined in 5.5.1.2 and 5.5.2.2.

5.6.1 The objectives of the pilot study

The aim of the pilot study was twofold: first, to use the results obtained to develop the survey which was to be used later in the main study; second, to assess the usability and practicability of the two instruments and of the data collection and data analysis techniques that would be used with the two instruments. Other objectives include the following.

- After being away from Saudi Arabia for more than three years, I see it as necessary to observe and understand what actually happens in the Arabic language classroom as a refamiliarisation exercise.
Because classroom-based research is a new phenomenon in the TAFL context in Saudi Arabia, I see the need for me to become aware of the processes involved in gaining access to the classroom for research purposes, as well as to the students themselves.

- Any difficulties which were encountered during the pilot study could be avoided in the main study.
- It was important to see whether the intended population was capable of reporting adequately in Arabic on their learning strategies.
- Other related issues which had not been considered or foreseen at the planning stage could be dealt with after the pilot study.
- Conducting the pilot study would also give the researcher a degree of experience which would be of great help when undertaking the main study.

5.6.2 Pilot subjects
The selection of the four participants was carried out as indicated in 5.5.3. Two teachers were asked to select the best two and the worst two learners from among eight students already chosen as successful and less successful learners. The selection made by the two teachers was identical. However, it should be noted that one successful learner was replaced by another student chosen by the same two teachers. The reason for dropping this learner was that he was not a typical learner of Arabic due to his high proficiency level, the result of his having taught Arabic in his home country before coming to Saudi Arabia. In addition, he spent much of his time in attending religious courses outside the university in Riyadh.

5.6.3 Findings from the pilot study
In this section, some points and notes about the pilot study will be discussed.

1. Having the same group of learners compile diaries and take part in interviews did not seem to cause any cross-contamination of data. On the contrary, this procedure enabled the researcher to cross-check.

2. The introductory meeting with each participant was conducted without the presence of the teacher. This was due to the teachers' commitments. However, teachers introduced the researcher to the learners.

3. The introductory meeting with each participant took 8-10 minutes.
4. The teachers' cooperation was excellent and highly appreciated.

5. The students' reaction to the study and their cooperation with the researcher were generally good.

6. The students' capability to report in Arabic on their learning strategies was rather adequate.

Diaries

1. The training session to show students how and what to report was very important.

2. This training session took from 15 to 20 minutes.

3. It was also important to conduct the interviews when the charts were collected because some students might not record useful information. For example, one learner did not write anything except some vocabulary items that he had learnt, so his chart was not helpful; but the interview with him was very helpful and revealing.

4. Although the precise duration of the interviews depended on what was written in the charts, they lasted for about 10-15 minutes.

5. These interviews were recorded but the researcher did not take notes during the interview. Conducting the interview and taking notes at the same time was found to be difficult. In addition, audio-recording could perform the task more accurately.

Interviews

1. The lessons that were attended were on writing, reading, listening and rhetoric. All these lessons involved the introduction of new words.

2. Although the teaching style followed in the Institute is a teacher-centred one, attending the lessons was helpful when conducting the interviews. At least, the researcher was acquainted with the general atmosphere.

3. Each interview lasted for about 30 minutes.

4. All interviews were conducted in the meeting room of the Institute.

5. During most of the observation periods, the learners appeared to be undisturbed by the presence of the researcher in the classroom.

Transcription was carried out during the data collection phase. Each interview was transcribed on the same day as it was conducted. The analysis was carried out in
Leeds. It should be mentioned that the researcher did not translate the whole data, but performed the translation after conducting the analysis.

5.6.4 Analysis of pilot study data

One of the objectives of the pilot study was to develop a workable framework for analysing the data of the multiple cases, which could then be used to analyse the data of the main study. Two versions were used in order to evaluate the best way of presenting the results of the multiple cases in the final manuscript.

The first version

In the first version, analysis of the data involved three stages. In the first stage, the information was edited, redundancies were sorted out, and parts were fitted together and indexed according to the seven aspects of vocabulary learning which served as a general framework for the analysis, namely, non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorizing new lexical items, practising newly learnt words, metacognitive strategies and expanding lexical knowledge. After the data relating to these aspects had been categorized, the second stage involved extracting learning strategies and formulating them as strategy descriptors (e.g., using an Arabic-Arabic dictionary). The last stage of the analysis involved making some modifications to the strategy descriptors so that they would be suitable for presentation in the final multiple cases report. These modifications to the descriptors included eliminating some, combining two or more and ordering them. In this version, single cases were not presented individually in the final manuscript. Instead, all the strategies used by successful learners that were identified in each individual case were compiled into one general profile outlining their strategies for learning vocabulary. In order to organize the data further, I devised sub-categories for each of the seven main categories. Another analysis was made by grouping all the participants' reported strategies according to these sub-categories within each main category. The responses of each participant were listed under these sub-categories, unless the strategies of two participants were exactly the same. In this case, the strategy was mentioned only once and the number of learners who used it was shown. Similarly, the behaviours of each less successful learner were compiled into one profile which was then compared to that of the successful learners.
The second version

In the second version, also, the information was edited, redundancies were sorted out, and parts were fitted together and indexed according to the seven aspects of vocabulary learning which served as a general framework for analysis, namely, non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorizing new lexical items, practising newly learnt words, metacognitive strategies and expanding lexical knowledge. The data were then presented in the final multiple cases report according to these seven categories used to organize the raw data (Merriam 1988). In this version, each case was presented individually (qualitatively) in the final manuscript. A cross-case comparison section was followed in order to compare the successful learners and the less successful learners by reference to their strategy use. Thus, this version contains both the individual cases and a cross-case section (Yin 1994).

5.6.5 Implications for the main study

The results of the pilot study prompted the following changes to the methodology of the study:

1. A slightly different procedure was adopted in the main study to reduce any negative effect which might have been caused by the design of the multiple cases. Instead of conducting the interview (after the lesson attended) with a particular participant in the same week that the chart was given, the interview was carried out in the following week after the chart had been returned. Using this procedure, the multiple cases with ten participants would take six weeks instead of five (see sub-section 5.7.1.1).

2. The introductory meeting with each participant was conducted without the presence of the teacher. However, teachers introduced the researcher to the learners.

3. A background questionnaire was designed to be filled in by the learners participating in the multiple cases. This questionnaire included questions about the participant's age, mother tongue, nationality, his objectives in learning Arabic and so on (Appendix 3). This questionnaire was given to each participant after receiving his chart and conducting the interview with him.
Diaries

1. Regarding the chart, the phrase “at home” was added to the first point in the instructions (see Appendix 1). This was done to remind students that they should write in the chart what they did at home only, and was made necessary by the fact that some students in the pilot study recorded what they did in class.

2. More details (e.g. examples) were included in the fifth point in the instructions.

3. Students were asked (and this was stated in the instructions) to include all the words they learnt at home in the chart; a specific place in the chart was allotted for this purpose. This is because the nature of the word sometimes plays a significant part in applying particular strategies, and this information would help the researcher to ask deeper questions.

4. I did not take notes during the interview, as it was learned in the pilot study that conducting the interview while taking notes was inconvenient and, in any case, audio-recording could perform the task more accurately.

Interviews

1. In the main study, I decided to confine the lessons attended to reading and listening, due to the nature of these two subjects, since learners usually try to understand every word of what has been read or listened to, and this can help the researcher in asking questions.

2. In order to get more detailed information about students’ strategies in dictionary use and note-taking, participants were asked to bring their dictionaries and vocabulary notebooks with them to the interviews. Participants were asked to show the researcher how they usually used their dictionaries. In addition, the researcher examined their notebooks to gain a clearer picture of their note-taking strategies. McCarthy (1990) suggests looking at students’ own vocabulary notebooks to assess their organisation of their notes and how they approach the note-taking process.

3. Additional questions were added to the interview guide (See Interview Guide, Appendix 5: added questions are in bold).
Data analysis

After trying out the two methods of analyzing the data of the pilot study (5.6.4), it seemed that the second version was more suitable for adoption in the main study, for the following reasons:

1. The profile of strategy use of each participant would be lost in the first version.
2. Combining the strategies of each group in the first version would lead to a condensing of the strategies, which might result in losing some aspects of strategy use.
3. Strategy combination would be better maintained in the second version than in the first.
4. Strategy order and links between strategies for each participant would be shown in the second version.

5.7 The Main Study

The main study was conducted during October, November and December 1999. It comprises the multiple cases and the survey. In this section, only the carrying out of the multiple cases will be discussed. The conduct of the survey will be described in section 5.8.

5.7.1 The multiple cases

The multiple cases were conducted with ten learners, using diaries and interviews. The procedures that were employed were the same as those outlined in 5.5.1.2 and 5.5.2.2 and the modifications that were prompted by the pilot study that have been discussed in 5.6.5.

5.7.1.1 The participants

The selection of the ten participants was carried out as indicated in 5.5.3. However, three of the students chosen to be the subjects of the multiple cases refused to participate in the study at the introductory meeting. The first (successful) said that he was too busy working in the students' club. The second (less successful) said that he was occupied with university administration. The third (less successful) did not give any reason. These three students were replaced by another three.
In addition, two students (one successful and one less successful) who agreed to participate in the research and took the charts away with them also had to be replaced because, although these two had learnt new words during that week, as they told the researcher, they had not written anything in their charts. Because of this the multiple cases took seven weeks instead of six. Each participant filled in the background questionnaire that had been designed to be used specifically by the participants in the multiple cases. The nationalities and proficiency levels of the participants in the multiple cases are presented in Table 5.1 below. More information about the participants can be found in Tables 6.3 and 6.4 in Chapter Six.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Nationality</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Sri Lanka</td>
<td>3</td>
</tr>
<tr>
<td>P2</td>
<td>Guinea</td>
<td>4</td>
</tr>
<tr>
<td>P3</td>
<td>Bosnia</td>
<td>3</td>
</tr>
<tr>
<td>P4</td>
<td>Thailand</td>
<td>4</td>
</tr>
<tr>
<td>P5</td>
<td>Mali</td>
<td>3</td>
</tr>
<tr>
<td>P6</td>
<td>Ghana</td>
<td>4</td>
</tr>
<tr>
<td>P7</td>
<td>Ghana</td>
<td>4</td>
</tr>
<tr>
<td>P8</td>
<td>Bosnia</td>
<td>4</td>
</tr>
<tr>
<td>P9</td>
<td>Pakistan</td>
<td>4</td>
</tr>
<tr>
<td>P10</td>
<td>Burkina</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 5.1 The nationalities and proficiency levels of the participants

5.7.1.2 Diary-keeping

- The training session took around 10-15 minutes: the maximum was 15 and the minimum was 8 minutes. There was no difference between the successful and the less successful learners regarding the time spent in training.

- The interviews conducted on receiving the participants’ charts took around 15-30 minutes: the maximum was 30 and the minimum was 11 minutes. There was a substantial difference between the successful and the less successful learners regarding the length of these interviews. As can be seen in Table 5.2 below, the interviews with the successful learners took longer than those with the less successful ones, partly because the successful learners provided more
information in their charts. For example, two less successful learners, P6 and P7, wrote nothing on four of the seven days. As a result, the interviews with them were the shortest among all the participants.

<table>
<thead>
<tr>
<th>The successful learners</th>
<th>Time</th>
<th>The less successful learners</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1 (P1)</td>
<td>19</td>
<td>Participant 6 (P6)</td>
<td>11</td>
</tr>
<tr>
<td>Participant 2 (P2)</td>
<td>29</td>
<td>Participant 7 (P7)</td>
<td>11</td>
</tr>
<tr>
<td>Participant 3 (P3)</td>
<td>30</td>
<td>Participant 8 (P8)</td>
<td>17</td>
</tr>
<tr>
<td>Participant 4 (P4)</td>
<td>19</td>
<td>Participant 9 (P9)</td>
<td>18</td>
</tr>
<tr>
<td>Participant 5 (P5)</td>
<td>20</td>
<td>Participant 10 (P10)</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 5.2 Lengths of diary interviews

- The diaries collected, especially those from some learners in this study would not be useful in themselves. However, the interviews that were conducted with the participants when the diaries were collected proved very useful. The following two extracts illustrate this clearly (it must be noted that some extracts from the data were translated from Arabic into English to be included in the thesis):

P3 wrote in his diary: “I heard two new words in a lecture more than once and I memorized them then I asked my teacher about their meanings.”

R: You mean you heard them in the class?
P: No. this was outside university in the evening.
R: Do you usually attend lectures outside the university?
P: Yes, sometimes.
R: In the mosques?
P: No. this was not in the mosque. I was invited to attend.
R: Do you usually pay attention to new words when you listen to lectures?
P: Yes, especially when a particular word was repeated several times.

P2 wrote in his diary: “I read some linguistic books today”

R: What do you mean by linguistic books?
P: Grammar books.
R: From outside of the curriculum?
P: Yes. I have some books which I usually read.
R: Do you always do this?
P: Yes, it is my habit.

- The multiple cases for this research, then, incorporated two interviews: one based on the diary and the other on the guide made by the researcher. All interviews were conducted in a private room provided for the researcher.
Writing a satisfactory diary is a difficult task and one which needs an extensive period of training, which unfortunately was precluded by the nature of this study.

Another point, which is related to the preceding one, is that many students may be influenced by the training itself and indeed some students in this study seem to have been affected by the instructions given in the chart.

During the training session, some students thought that the instructions were questions and that they should answer them. Such a misunderstanding may have been a result of AFL students' common expectation that they will usually be presented with questions to be answered.

Although the participants had been reminded that they should write in the chart only what they did at home, some, such as P8 and P10, recorded on some days what they did in the class.

Some participants, such as P10, did not write what they did on a particular day. Instead they described their general approach to learning new words.

Requiring participants to write the new words they learnt in their charts proved to be a good idea, because learning certain words may involve applying special strategies. The following example reveals this clearly:

P5 wrote the word نفسي (transmigrate) in his diary, mentioning that he learnt this word during his reading of a book.
R: Did you memorize it?
P: Yes.
R: How?
P: This word is from the word قميص (shirt), I looked at the form of the word.
R: You mean you associated it with the word قميص?
P: Yes.
R: You mean you sometimes associate words that look similar?
P: Yes.
R: The word نفسي differs from the word قميص in meaning, but they are similar in their forms.
P: Yes, I associate them to remember them together.
5.7.1.3 Interviews

- The interviews after the lesson took around 30-45 minutes: the maximum was 48 and the minimum was 27 minutes. There was no difference between the successful learners and the less successful ones regarding the length of these interviews.

- Some participants did not bring their notebooks to the interview. They said that they had forgotten them. They seemed to be unwilling, perhaps embarrassed, to let another person look at their notebooks.

- Some students, such as P6, did not clearly understand certain questions. In such cases, the interviewer needed to repeat the question in different ways and to give examples. This resulted in the interview taking more time. This situation can be seen in the following extract:

  R: When you look up a word in the dictionary, what do you look for? What do you read exactly?
P: When I read a book and am faced with a word whose meaning I do not know, I open my dictionary.
  R: Pay attention: if you do not know its meaning and you open your dictionary to discover its meaning, what do you read? The dictionary contains a lot of information about the word, so do you read all this information or do you pay attention to particular information?

- Interviews with some participants, such as P1, did not last long because they could understand the questions well and answer them very clearly.

- Most of the responses of some students, such as P10, were “yes”, “no” or very brief. In such cases, the interviewer tried to encourage the students to answer more fully. Note the following extract:

  R: What do you write in your notebook, the word and its meaning?
P10: Yes, and its inflections.
  R: Do you write its plural?
P: Yes.
  R: What else?
P: Nothing.
  R: What about short vowels?
P: No.

- Some students, such as P4, talked more, explained and gave the reason behind their behaviour. Note the following extract:

  R: Do you pay attention to the examples provided by the dictionary?
P4: Yes, because these examples confirm the required meanings and illustrate the usage of the words. Our problem lies in the usage of the words. We may know the meaning of a particular word, but we
sometimes cannot make use of it. So, even if we know a word's meaning, it is very possible to make mistakes in word usage.

- Some students, such as P10, had difficulty in expressing themselves or describing their activity.

5.8 The Survey

The second part of this study was a survey, which is one of the most common and successful instruments used by researchers to identify learning strategies. Summative rating scales are among the most efficient and comprehensive ways to assess frequency of language learning strategy use. (Oxford & Burry-stock 1995:1)

Questionnaires can provide a wealth of data which is easily collected and relatively easily comparable across subjects. Furthermore, the questionnaire could give an overall picture of the use of vocabulary learning strategies by the entire population at ITANA, while the use of the interview and diaries in the multiple cases was limited to only some students. Seliger and Shohamy (1989) find the survey and questionnaires quite useful for collecting data about language learning strategies, especially from large groups of subjects. Moreover, a questionnaire is easy to administer and to analyse, and it does not demand too much time from the students and the researcher. It is also less threatening, being administered using paper and pencil under conditions of confidentiality (Oxford 1996a). However, self-report scales have the disadvantage of not describing in detail the learning strategies a student uses in response to any specific language task, and respondents may report what they perceive they do rather than what they actually do (Oxford 1996a). Further, questionnaires are less sensitive to fine individual differences in respect of the learning experience (McGroarty & Oxford 1990). As has been seen previously (see Table 3.2), questionnaires have been employed widely in vocabulary strategy research.

5.8.1 The purpose of the survey

The purpose of the survey was to examine the relationship between vocabulary strategy use and certain individual, situational and social factors. The aim was to examine variations in vocabulary strategy use from different perspectives: the overall
vocabulary strategy use; the seven categories into which the items of the questionnaire have been categorised, namely

1. Non-dictionary strategies for discovering the meanings of new words.
2. Dictionary use.
3. Note-taking.
4. Memorization techniques.
5. Practice.
7. Expanding vocabulary knowledge.

and finally the individual strategy use. It is also intended to examine the variation in students' reported strategy use according to the following factors: students' native languages, proficiency level, level of achievement, course type, the variety of Arabic used outside class, and religious identity.

5.8.2 The design of the survey

The Vocabulary Strategy Questionnaire (VSQ) is a similar instrument to SILL (the Strategy Inventory for Language Learning, Oxford 1990). The VSQ was developed after analysing the results of the interview responses and diary notes that had been gathered from the pilot study. Thus, most of the items of the VSQ were taken from the data of the multiple cases that had been carried out in the pilot phase. Some other items were taken from the literature. Table 5.3 below summarizes the sources of vocabulary strategy items included in the VSQ. The VSQ consists of seven parts; each part includes a number of items as follows (see Appendix 8):

1. Part One consists of eight items related to the non-dictionary strategies for discovering the meanings of new words.
2. Part Two consists of eleven items related to dictionary use strategies.
3. Part Three consists of thirteen items related to note-taking strategies.
4. Part Four consists of eleven items related to memorization strategies.
5. Part Five consists of seven items related to practice strategies.
6. Part Six consists of seven items related to metacognitive strategies.
7. Part Seven consists of six items related to expanding vocabulary knowledge strategies.

<table>
<thead>
<tr>
<th>Strategy item</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Part 1: Non-dictionary strategies for discovering the meanings of new words</strong></td>
<td></td>
</tr>
<tr>
<td>1. When I encounter a new word in the class, I ask my teacher about its meaning.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>2. When I ask my teacher about a new word, I ask him for an Arabic synonym or antonym.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>3. If I could not ask my teacher about a word, I ask an excellent</td>
<td>Reported in the pilot study</td>
</tr>
</tbody>
</table>
4. In class, I guess the meaning of the word I do not understand then I ask my teacher for confirmation. Reported in the pilot study
5. When I face a new word, I check for L1 cognate. Schmitt 1997
6. When I hear a new word used by a native speaker, I ask them about its meaning. Reported in the pilot study
7. I look up new words in the textbook glossary. Reported in the pilot study
8. When I ask the teacher about a new word, I ask him for an example of its usage. Reported in the pilot study

### Part 2: Dictionary use

| 1. I look up new words in an Arabic-L1 dictionary. Reported in the pilot study |
| 2. When I look up a word in the dictionary, I look only for its meaning. Reported in the pilot study |
| 3. I look up new words in an Arabic-L1 dictionary then in an Arabic-Arabic dictionary or vice versa for confirmation. Reported in the pilot study |
| 4. When I look up a word in the dictionary, I look for an example of its usage. Reported in the pilot study |
| 5. When I get interested in another new word in the definition of the word I look up, I look up this word as well. Gu & Johnson 1996 |
| 6. I look up new words in the electronic dictionary. Reported in the pilot study |
| 7. When I look up a word in the dictionary, I read the whole entry. Reported in the pilot study |
| 8. I use an Arabic-English dictionary to discover the meanings of new words. Reported in the pilot study |
| 9. When I look up a word in the dictionary, I look for its synonym and antonym. Reported in the pilot study |
| 10. I use an Arabic-Arabic dictionary to discover the meanings of new words. Reported in the pilot study |
| 11. When I look up a word in the dictionary, I look for its inflection. Reported in the pilot study |

### Part 3: Note-taking

| 1. I specify a vocabulary notebook for each module. Reported in the pilot study |
| 2. In my notebook, I record the mother-tongue equivalent of each word. Reported in the pilot study |
| 3. I write down the short vowels of each word in my notebook. Reported in the pilot study |
| 4. In class, I write down the meanings of new words only on the textbook. Reported in the pilot study |
| 5. In my notebook, I write down the synonym and antonym of each word. Reported in the pilot study |
| 7. I record the inflection of each word in my notebook. Reported in the pilot study |
| 8. I arrange the words according to the lesson in my notebook. Reported in the pilot study |
| 9. In my notebook, I record the plural of each noun. Reported in the pilot study |
| 10. I write down examples showing the usage of the word in my notebook. Reported in the pilot study |
| 11. I record the conjugation of each verb in my notebook. Reported in the pilot study |
| 12. In my notebook, I write down the English equivalent of each word. Reported in the pilot study |
| 13. I specify a notebook for words learnt outside the curriculum. Reported in the pilot study |

### Part 4: Memorization techniques

| 1. I discuss word meaning and usage with a colleague to commit them to memory. Reported in the pilot study |
| 2. When I try to remember a word, I remember the sentence in which the word is used. Gu & Johnson 1996 |
| 3. I repeat words orally and in writing to memorize them. Reported in the pilot study |
| 4. I memorize together words that share the same root. Reported in the pilot study |
| 5. To memorize new words, I write them on one side of a card and their explanations on the other side. Gu & Johnson 1996 |
| 6. I use newly learnt words in speaking to help me commit them to memory. Reported in the pilot study |
| 7. When I memorize a word, I connect it to its synonym and antonym. Schmitt 1997 |
| 8. I associate a new word with a known Arabic word that looks similar. Gu & Johnson 1996 |
to help to commit it to memory.

9. I deliberately study word-formation rules in order to remember more words.

10. I associate a new word with a known Arabic word that sounds similar to help to commit it to memory.

11. I memorize words by repeating them orally.

<table>
<thead>
<tr>
<th>Part 5: Practice</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I practise newly learnt words when speaking with someone.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>2. I try to make use of newly learnt words in imaginary situations.</td>
<td>Ahmed 1988</td>
</tr>
<tr>
<td>3. I pay attention to newly learnt words when used by native speakers.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>4. I use newly learnt words in speaking with colleagues in class whenever possible.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>5. I practise newly learnt words by using them in sentences.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>6. I use newly learnt words in speaking with the teacher in class whenever possible.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>7. I try to make use of newly learnt words when writing in Arabic.</td>
<td>Reported in the pilot study</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part 6: Metacognitive strategies</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I review newly learnt words on a regular basis.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>2. I study new words in the textbook before the lesson.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>3. I ask a colleague to test me on some of the words that I have learnt.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>4. I study new words introduced in the class when I go home.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>5. I pay attention to every unknown word introduced in the class.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>6. I test myself on some of the words that I have recorded.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>7. I spend a lot of time studying and memorizing new words.</td>
<td>Reported in the pilot study</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Part 7: Expanding lexical knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I learn new vocabulary items when reading Arabic books.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>2. I learn new words when reading the Holy Quran.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>3. I pick up new words when I read newspapers.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>4. I learn new words when I listen to cassettes (speeches and sermons).</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>5. I pick up new vocabulary items when listening to the radio.</td>
<td>Reported in the pilot study</td>
</tr>
<tr>
<td>6. I pick up new words when speaking with native speakers.</td>
<td>Reported in the pilot study</td>
</tr>
</tbody>
</table>

Table 5.3 The sources of vocabulary strategy items included in the VSQ

As a whole, the VSQ includes 63 items, which follow the "I do such-and-such" format. Following Embi (1996) in his Language Strategy Questionnaire, the participants in the present study were asked to respond on a 4-Point Likert Scale ranging from 1 (Never true of me) to 4 (Always true of me). One difference between the VSQ and the SELL is that SELL uses 5 response options. For internal consistency, Cronbach alpha was chosen as the reliability index on continuous data such as the Likert-type scale used in the VSQ. The items scales in the VSQ show a high reliability of .89. Oxford and Burry-Stock (1995) reported reliabilities of different versions of SELL ranging between .85 and .91.

A background questionnaire was also attached to the VSQ to gather information relevant to the scope of this study, such as first language, language proficiency level, course type, the variety of Arabic used outside of the class, level of achievement, religious identity, etc (see Appendix 6). The VSQ and the background questionnaire
were available in two versions: one in Arabic (Appendices 7 & 9) and the other in English (Appendices 6 & 8). Students were free to choose either. However, it was intended to use the Arabic version with the morning class students (2.2.2.1) and the English version with those from the evening classes (2.2.2.2). This is because the majority of the students in the former group do not speak English and their proficiency in Arabic is usually good enough to understand the questionnaire statements, whereas almost all the students in the latter group are proficient in English, while their Arabic proficiency, especially that of the low-level students, is not good enough to understand every item in the questionnaires. However, the choice of which version to use was ultimately left to the students themselves.

5.8.3 Population
All the students at ITANA in both programmes (morning and evening) were involved in the survey using the VSQ. This was done in order to assess the overall pattern of strategies used by all students at the Institute. The sample covered various first language and cultural backgrounds, and different age groups.

5.8.4 Piloting the VSQ
Given the fact that questionnaire statements may have ambiguities in their wording which could lead to problems of interpretation on the part of the respondents, I piloted the survey twice. First, the VSQ was piloted with two English native speakers studying Arabic at Leeds University in August 1999. Both students were advanced learners. The main purpose of this piloting was to find out how long it would take to fill in the VSQ and whether the language and the layout of the questionnaire were appropriate and clear. These two learners were invited to complete the questionnaire and comment on the clarity of each item in the VSQ. They reported no ambiguity and took about 12 minutes to complete the questionnaire.

The VSQ was piloted for a second time with nine learners of Arabic at King Saud University in Riyadh. The purpose of this piloting was (1) to pilot the Arabic version of the VSQ, (2) to pilot the English version of the VSQ with non-native speakers of English, and (3) to pilot both versions with lower level students since the first piloting conducted in Leeds was done with high-level students. These nine learners were also invited to complete the questionnaire and comment on the clarity of its
144

items, in order to discover which items might cause difficulty to the respondents so that they could be eliminated or modified before the main administration of the questionnaire.

These nine learners were similar to the intended population. Two of the nine were in the first level, five were in the second level and two were in the third level. Only one learner chose to use the English version of the VSQ. These learners took about 35 minutes to complete the questionnaire, thus taking more time than their peers who filled in the questionnaire in Leeds. This is due to the fact that the two learners who completed the VSQ in Leeds were native English speakers using the English version. However, although these nine learners asked some questions about certain aspects of the questionnaire, they reported that in general the VSQ was not difficult. Consequently, no changes were made to the questionnaire items.

5.8.5 Administration of the VSQ

The distribution and collection of the questionnaire was administered by the researcher himself. Before handing out the questionnaire, the researcher explained to the students the purpose and importance of the research. In addition, I explained to the students that there were no right and wrong answers to the statements, that they should respond as honestly and accurately as possible, and that their responses would remain confidential. Furthermore, students were provided with an example of how to respond to the questions in the questionnaire. The researcher was present when the students completed the questionnaire in order to answer any questions or clarify any item in the VSQ that they might not understand or might find ambiguous.

162 students from four levels completed the questionnaire. They took around 25-50 minutes to fill in the VSQ. In general, students in the lower levels needed more time to complete the questionnaire than students in the higher levels. Moreover, the evening-class students (2.2.2.2) took less time than their counterparts in the morning class (2.2.2.1), because most students in the evening programme are proficient in English and hence chose to use the English version of the VSQ.
5.9 Diglossia Interview
After completion of the survey by the learners, eight of the respondents, who reported using the colloquial variety of Arabic outside class, were selected for interview. The purpose of these interviews was to ask these learners about their strategies for dealing with the diglossic situation of Arabic when learning vocabulary. The following questions were covered in the interviews:

- How do you learn Colloquial Arabic? How do you learn Colloquial words? What are your sources?
- How do you differentiate between Standard vocabulary and Colloquial vocabulary? How do you combine them? Do you use particular techniques that help you in dealing with Standard and Colloquial items?

5.10 Combining the Multiple Cases and the Survey
The two parts of the study, namely, the multiple cases and the survey, complement each other, as can be seen from the following points:

First, the number of students in the multiple cases was small, and this makes for the limited generalizability of the results. On the other hand, the survey involved the whole population, thus revealing more comprehensively patterns of vocabulary strategy use.

Second, students' linguistic and cultural backgrounds were not taken into account when comparing the strategies of successful and less successful learners in the multiple cases, whereas in the survey, students' native languages were considered as a variable.

Third, part-time students were excluded from the multiple cases, which was confined to full-time students. On the other hand, all students were involved in the survey and the variations in vocabulary strategy use were examined according to this factor (full-time students vs. part-time students).
Fourth, the participants involved in the multiple cases were from advanced levels. In the survey, students at all levels were included in the survey and variations in vocabulary strategy use were also examined according to this factor.

Fifth, all the participants in the multiple cases were Muslims. By contrast, the survey included both Muslims and non-Muslims, and variations in vocabulary strategy use were also investigated in relation to this factor (Muslim students vs. non-Muslims).

Sixth, the relationship between vocabulary strategy use and success was also examined in the survey by investigating variations in vocabulary strategy use between high-achievers and low-achievers. This was done in order to compare the results of the survey with those of the multiple cases and, moreover, to see whether the questionnaire was capable of elucidating the differences between the two groups of learners in vocabulary strategy use.

5.11 Ethical Issues

According to Ethical Guidelines of British Educational Research Association, the following ethical points should be made clear:
1. This research is sponsored by Al-Imam Muhammad Ibn Saud Islamic University in Riyadh.
2. As stated earlier, participants were informed about the purpose of this study.
3. Participants were also anonymous.
4. Honesty and openness characterised the relationship between the researcher and participants.
5. The researcher avoided fabrication, falsification, or misrepresentation of evidence, data, findings or conclusions.

5.12 Chapter Summary

This chapter has presented the methodology pursued in the present study. A rationale has been provided for combining the multiple cases and the survey, and for using a multiple approach to the investigation of vocabulary learning strategies. Some methodological issues have also been discussed. The designs and data collection
procedures of the two instruments (diary and interview) used in the multiple cases have been explained in detail. The chapter has also described how the pilot study was conducted. It has been shown that the pilot study was useful for refining the main study in respect of both data collection and data analysis. The process of designing the Vocabulary Strategy Questionnaire (VSQ), its piloting and its administration in the main study were also reported.

The methodology adopted in both the multiple cases and the survey having been described, the next two chapters report the results and findings of the multiple cases and the survey respectively.
Chapter Six

THE MULTIPLE CASES: ANALYSIS, RESULTS AND INITIAL DISCUSSION

6.1 Introduction

This chapter reports the findings of the first part of the present study: the multiple cases. The purpose of the chapter is therefore to explore the relationship between the use of vocabulary learning strategies and success in language learning by identifying and comparing the vocabulary learning strategies employed by five successful learners of Arabic with those of five less successful learners. This chapter tries to provide an answer to the first main research question:

RQ1: What are the vocabulary learning strategies employed by the successful and less successful learners of Arabic as a Foreign Language (AFL) in the study?

1. How do the successful and the less successful learners differ in using non-dictionary strategies for discovering the meanings of new words?
2. How do they differ in using dictionaries?
3. How do they differ in note-taking?
4. How do they differ in memorizing newly learnt words?
5. How do they differ in practising newly learnt words?
6. How do they differ in planning, organizing and evaluating their learning?
7. How do they differ in expanding their lexical knowledge?

6.2 Data Analysis

The analysis of the multiple cases data consisted of two stages. In the first stage, the strategies reported in both the diaries of and the interviews with each participant were indexed according to the seven aspects of vocabulary learning, which served as a general framework for analysis: namely, non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorizing new lexical items, practising newly learnt words, planning, organizing and evaluating the process of vocabulary learning (metacognitive strategies), and expanding lexical knowledge. This framework is, then, a general analytic strategy which follows the vocabulary learning strategy classification adopted in this study. This general strategy is very similar to the analytic strategy following the theoretical propositions that led to the case study suggested by Yin (1994). Yin argues that this is the preferred strategy to analyze the case study data, and it is a powerful aid in guiding the analysis (Robson 1993). In the second stage, the information included in each category was edited and
organized, and redundancies were sorted out. The data will be presented in the final multiple cases report according to these seven categories used to organize the raw data. Because “important information about individual behavior...[may be] lost in group analysis” (Schmitt & Meara 1997: 20), each case has been dealt with individually (qualitatively) in the final manuscript, and each case will also be first presented individually. Ahmed (1989) acknowledged that by reducing all the strategies to binary categories, he lost information about how often individual students used particular strategies, and stated that “it is possible that finer distinctions could have been lost as a result of this” (p.12). Such a thick description (Robson 1993) has a high validity and reliability. A cross-case comparison section will then follow in order to compare the successful learners with the less successful ones by reference to their vocabulary strategy use. However, this chapter begins with two important findings that have been identified in this study, which apply across all the participants; that is, the three levels of strategies, and strategy order and combination

6.3 Three Levels of Strategies

The first significant outcome is the need for the identification of three levels of strategies. These three levels represent points in a hierarchy from general strategies to more specific ones. The first level, the most general one, is termed the ‘main strategy level’. This level contains the seven main categories adopted in this study; namely, non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorization, practice, metacognitive, and expanding lexical knowledge. As mentioned previously (4.2), these seven categories were drawn from the literature, as empirically-driven categories. This level corresponds to Ahmed’s macro-strategy level (1988).

By the second level of strategy I mean the individual strategies used within each of the seven main categories. This level consists of two types of strategies: one was developed when designing the research instruments (see Appendix 5: Interview Guide) and one emerged from the data. Thus, this level is a mixture of literature-driven and data-driven strategies. I term this the ‘strategy level’; it is more specific than the first level and this corresponds to Ahmed’s micro-strategy level (1988). Guessing, asking the teacher, and asking colleagues are examples of this level used
within the main strategy level of non-dictionary strategies for discovering meanings (Figure 6.1). Reading books, reading newspapers, listening to the radio and watching TV are also examples of this level used within the main strategy level of expanding lexical knowledge (Figure 6.2).

The most specific level is the third one, which emerged from the data of this study. It contains strategies described by students and concerns how they spoke about their strategies. I termed this the 'substrategy level'; it comprises strategies used within the second-level strategies. For example, asking colleagues is a general strategy (second level) which contains different specific strategies such as asking an excellent colleague, asking a colleague who speaks the student’s mother tongue, and ignoring colleagues (Figure 6.1). Listening to the radio is also a general strategy (second level) which contains various specific strategies such as listening to the news, listening to religious programmes, and recording programmes (Figure 6.2). All these strategies, used within the strategy of asking colleagues and the strategy of listening to the radio, are examples of this level and were termed substrategies in the present study.

These three levels of strategies have been constructed because it has been found that students differ in their use of some strategies. For example, guessing is a discovery strategy and students do not differ only in how often they guess, but also in reporting the cues they use in guessing. Consequently, as ‘describing the cues used in guessing’ cannot be categorized in the same level as the strategy of guessing itself, it was deemed necessary to categorize it as belonging to a more specific level than the strategy of guessing. The first level (main strategy level) has been used in designing the study and analyzing the raw data. The other two levels (strategy level and substrategy level) have been employed in analyzing the data when comparing the two groups of students.
Main strategy Level

Non-Dictionary strategies for discovering the meanings of new words

Strategy Level
- guessing

Substrategy level
- use clues
- repeated guessing

- ask specific teacher
- ask for limited information
- ask for a lot of information
- self-initiation before asking

- ask best colleague
- ask one speak first language
- avoid asking colleagues

Figure 6.1
Main strategy Level

Expanding Lexical Knowledge

Strategy Level
- reading books
- reading newspaper
- listening to radio
- watching TV

Substrategy level
- religious books
- focus on short words
- focus on headlines
- focus on short articles
- focus on sentence structure
- listen to news
- listen to religious program
- record some programs
- watch news
- watch serial
- watch comedy program

Figure 6.2
This three-level strategy has similarities with the continuum that proposed by Cohen (1998):

The term strategies has, in fact, been used to refer both to general approaches and to specific actions or techniques used to learn a second language. For example, a general approach strategy could be that of forming concepts and hypotheses about how the target language works. A more specific strategy could be that of improving reading comprehension in the new language. Among the substrategies aimed at improving reading comprehension could be any one of the strategies for determining whether a text is coherent - e.g. checking whether the direction and ordering of elements is clear, seeing if it is consistent and complete, and so forth. An even more specific strategy would be that of attempting to summarize the text in order to see if the ordering of the points makes coherent sense. A still more specific strategy would be to fine-tune the type of summarizing - e.g. that they be short, telegraphic summaries written in the margins of the text every several paragraphs (Cohen 1998: 9).

However, a hierarchy is used in this study rather than continuum to describe the relationship between the three levels, because we cannot use continuum in analyzing the data for practical reasons.

In addition, the literature includes many terms such as strategy, technique, tactic, macro-strategy, micro-strategy, and so on, which all refer to strategies (see sub-section 3.2.1 in Chapter Three). Cohen (1998), while acknowledging that there is a continuum from the broadest categories to the most specific, prefers to refer to all levels simply as strategies. The terminology of each level of strategy is not important in itself. What does appear to be of significance is that to understand the difference between the good and poor learners it seems that we need to consider the use of low-level strategies rather than just the use of the broadest categories. This issue has been largely neglected in strategy research.

The results of this study show that there are differences between the two groups of learners at all three levels of strategy. Comparison of strategy use by main strategy reveals that six main strategies (non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorization, practice and metacognitive) seem to be common to all participants in both groups (6.6.1, 6.6.2, 6.6.3, 6.6.4, 6.6.5 & 6.6.6). Expanding lexical knowledge was the only main strategy that distinguished successful learners from less successful ones (6.6.7). At the strategy and substrategy levels, there are major differences between the two groups in all the seven main strategies (categories). However, the major distinctions can be found in the third level of strategy, that is, substrategies. For example, both groups
make use of the strategy of revision, which is at the strategy level. But the difference lies in the strategy of structured revision, which is at the substrategy level. Another example can be seen in the strategy of practising words when speaking. Both groups make use of this strategy, which is at the strategy level. However, the difference lies in the use of the substrategy of speaking with native speakers, which is a feature of the successful learners rather than the less successful ones. This result confirms Ahmed’s (1989) finding that the differences between good and poor learners lie in their use of strategies and substrategies rather than main strategies. However, Ahmed used only two levels of strategies, whereas this study used three levels of strategies.

One issue worth mentioning is that these three levels of strategies are not represented in every single strategy. For example, some strategies in the ‘strategy level’ such as the strategies of self-assessment and problem-identification, do not contain specific strategies in the ‘substrategy level’. Therefore, further research is needed to describe the substrategies associated with certain strategies if they exist.

6.4 Strategy Order and Combination

The second interesting and important finding is that the students in this study seem to follow a structured approach consisting of a chain of actions in order to discover the meanings of new words. A close examination of Table 6.1 below shows that students do not turn to the next source unless the first source consulted (or to be consulted) is not available or does not provide the required information. It seems that the learners take these actions in a hierarchical way where the sequence of the actions is crucial. Thus, the relationship between the use of strategies is linear; the use of certain strategies precedes that of others. This finding conforms to Schouten-van Parreren’s (1995) formulation of the hierarchical order of strategy use, and McDonough’s (1995) description of linear relationship of the mental processes. Moreover, Oxford (1990) suggests that there is no fixed pattern of strategy use, and that strategies can be used in combination or sequence according to the learner’s propensity. Brown (1994) also proposes that learners have a whole host of possible ways to solve a particular problem and that they choose one or several of them in sequence to deal with a given problem.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Strategy order</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>In class: guess (could not)→ teacher (could not)→ colleague (could not)→ look up at home (could not)→ teacher. Out of class: guess (could not)→ dictionary (doubt)→ teacher.</td>
</tr>
<tr>
<td>P2</td>
<td>In class: guess (could not)→ teacher.</td>
</tr>
<tr>
<td>P3</td>
<td>In class: guess (then)→ teacher (could not)→ colleague. Out of class: teacher (not understood)→ dictionary</td>
</tr>
<tr>
<td>P4</td>
<td>In class: guess (could not)→ teacher. Out of class: guess (could not)→ monolingual dictionary (ambiguity)→ bilingual dictionary</td>
</tr>
<tr>
<td>P5</td>
<td>In class: guess (could not)→ dictionary (not found)→ teacher.</td>
</tr>
<tr>
<td>P6</td>
<td>In class: textbook glossary (not found)→ teacher (not understood)→ colleague. Out of class: dictionary (not understood)→ teacher or colleague</td>
</tr>
<tr>
<td>P7</td>
<td>In class: guess (could not)→ textbook glossary (not understood)→ teacher.</td>
</tr>
<tr>
<td>P8</td>
<td>In class: guess (could not)→ teacher.</td>
</tr>
<tr>
<td>P9</td>
<td>In class: teacher (could not)→ teacher again (on the following day)</td>
</tr>
<tr>
<td>P10</td>
<td>In class: teacher (could not)→ colleague (could not)→ dictionary at home.</td>
</tr>
</tbody>
</table>

Table 6.1 Order of strategies to discover the meanings of new words

This result is in line with the results of some studies (Young 1996; Erten 1998) that students use more than one strategy in linear order. However, both these studies differ from the present study in that they used the think-aloud method to elicit students’ strategies. Although think-aloud seems to be successful in uncovering strategy order, the interview as applied in this study was able to identify certain types of strategy order, as has been discussed earlier.

The use of several strategies together may involve a parallel order of strategies in which strategies are employed at the same time, but the methodology of this study was unable to capture such an order in using strategies. This finding suggests, however, that the order of strategies and the links between them is a very important aspect of strategy use. For example, asking the teacher is a strategy used by most students in this study (6.6.1.2). But there is a difference between a student who uses his teacher to verify his guess and a student who uses his teacher as a first resort. Another example is found in the strategy of asking colleagues (6.6.1.3). There is a critical difference between a learner who relies on his colleagues as major providers of word meaning and a learner who uses this strategy as a last resort. This aspect of strategy use is usually neglected in strategy research.
Moreover, one of the major findings of this study is that the participants appear to use some strategies in combination. What is meant in this study by strategy combination is that the strategies are employed very closely in time, or even if they occur remotely in time are employed to learn one single vocabulary item or some aspects of it. Some patterns of strategy combinations identified in this study are already shown in Table 6.1 above. Other patterns of strategy combination are illustrated in Table 6.2 below.

<table>
<thead>
<tr>
<th>Table 6.2 Patterns of strategy combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to monolingual dictionary (not clear) + refer to another monolingual dictionary</td>
</tr>
<tr>
<td>Refer to monolingual dictionary (ambiguity) + refer to bilingual dictionary</td>
</tr>
<tr>
<td>Refer to small monolingual dictionary (more information needed) + refer to big monolingual dictionary.</td>
</tr>
<tr>
<td>Refer to monolingual dictionary (not understood) + refer to Arabic-English dictionary</td>
</tr>
<tr>
<td>Use words in sentences + write these sentences + repeat these sentences.</td>
</tr>
<tr>
<td>Read text + stop and repeat some (difficult) items.</td>
</tr>
<tr>
<td>Repeat words orally + write what is memorized.</td>
</tr>
<tr>
<td>Use words in writing letters + revise notes when facing difficulty.</td>
</tr>
<tr>
<td>Use words in sentences + write these sentences on paper</td>
</tr>
<tr>
<td>Prepare oneself by reading text + underline new words + ask teacher about them.</td>
</tr>
<tr>
<td>Try to remember word meaning (could not) + read text several times + repeat new items.</td>
</tr>
<tr>
<td>Pay attention to new items in signs + take notes + look them up.</td>
</tr>
<tr>
<td>Read books + take notes of new items.</td>
</tr>
<tr>
<td>Read books + look up important words after reading.</td>
</tr>
<tr>
<td>Listen to radio + pay attention to items repeated + look them up.</td>
</tr>
<tr>
<td>Record some radio programmes + listen to them again + write them (sometimes)</td>
</tr>
</tbody>
</table>

This result confirms findings in the vocabulary strategy literature (Lawson & Hogben 1996; Erten 1998; Lehtonen 1998) that students use more than one strategy to learn the target words. In the language-learning strategy literature, O’Malley et al. (1985a) also indicate that some of the strategies, especially metacognitive and cognitive ones,
were used in combination in some cases. However, this study differs from previous studies in that it displays some patterns of strategy combination. Ellis (1994) points to a general weakness in much of the strategy research; namely, that strategies have been dealt with in isolation rather than in groups. He also adds that our knowledge about the most effective combinations of strategies is inadequate. It must be mentioned that in this study some effective combination of vocabulary learning strategies have been reported.

Some reasons have been provided in the literature to explain this phenomenon in strategy use. Lawson and Hogben (1996) attributed the use of strategies in combination to the language learning experience of their subjects, who were all experienced learners of Italian. Another explanation was offered by Schmitt (1997b, cited in Erten 1998), who suggests that the testing involved in some studies might have a washback effect on the number of strategies used by the students. Moreover, in an attempt to explain the use of several strategies by his subjects, Erten (1998) argues that the amount of information his subjects had to process for each word they studied may have prompted the use of different types of strategies; he adds that the words themselves may contain different morphological and etymological features that may have prompted such use. Although all these explanations are possible, this phenomenon seems to me a natural human process: one may apply several actions and mental processes to deal with a single issue. This view is in keeping with Schouten-van Pareren’s (1995) application of action psychology to vocabulary learning. She suggests that human beings undertake different kinds of actions which can be characterised by their structure in relation to achieving goals. These actions can also consist of different parts which themselves can be different actions. In addition, given that vocabulary learning is a multi-stage process, its nature probably entails applying several strategies.

6.5 The Profile of the Participants

6.5.1 The successful learners

To obtain background information about the participants in the multiple cases, a background questionnaire (Appendix 3) was given to each participant to fill in immediately after conducting the interview that followed classroom observation.
Table 6.3 below presents the profiles of the successful learners participating in the multiple cases.

<table>
<thead>
<tr>
<th>St</th>
<th>Age</th>
<th>Nationality</th>
<th>Job</th>
<th>Mother tongue</th>
<th>Foreign language spoken</th>
<th>Level</th>
<th>Length of stay in Saudi Arabia</th>
<th>Purpose of learning Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>27</td>
<td>Sri Lanka</td>
<td>Teacher</td>
<td>Tamil</td>
<td>Sinhala</td>
<td>3</td>
<td>1½ years</td>
<td>Religious Purposes &amp; to be teacher</td>
</tr>
<tr>
<td>P2</td>
<td>21</td>
<td>Guinea</td>
<td>Teacher</td>
<td>Soussou</td>
<td>French Mandinka</td>
<td>4</td>
<td>1 year</td>
<td>Religious purposes</td>
</tr>
<tr>
<td>P3</td>
<td>28</td>
<td>Bosnia</td>
<td>Electrician</td>
<td>Bosnian</td>
<td>German</td>
<td>3</td>
<td>7 months</td>
<td>Religious purposes</td>
</tr>
<tr>
<td>P4</td>
<td>21</td>
<td>Thailand</td>
<td>Student</td>
<td>Thai</td>
<td>Malay</td>
<td>4</td>
<td>1½ years</td>
<td>Religious purposes</td>
</tr>
<tr>
<td>P5</td>
<td>29</td>
<td>Mali</td>
<td>Teacher</td>
<td>Sango</td>
<td>Bemba Fulani</td>
<td>3</td>
<td>1½ years</td>
<td>Religious purposes</td>
</tr>
</tbody>
</table>

Table 6.3 The profiles of the successful learners

The vocabulary strategy use of the successful learners is given below to illustrate their individual ways of using vocabulary learning strategies. This approach has the strength of capturing the uniqueness and individuality of each participant, and the circumstances and contexts of strategy use in depth and detail. It also illustrates the complex and dynamic nature of strategy use.

6.5.1.1 The vocabulary strategy use of Participant one (P1)

Non-dictionary strategies for discovering the meanings of new words

P1 reported that in the class he usually tries to guess the meanings of new lexical items from the context, then he asks his teacher. If he is not able to ask his teacher, he asks one of the most able of his colleagues, and if this colleague does not know, P1 leaves the word aside to look up at home. If he cannot find an opportunity to look it up at home, he asks his teacher about it the following day; P1 reported that he asks him about the meaning of the word, its synonym, antonym and usage. But when asking a colleague, he asks only for the word meaning. When encountering a new vocabulary item out of class (e.g. during reading), P1 attempts to guess its meaning from the context reading the sentence several times whilst trying to discover the meaning of the word, and looking at the general meaning of the paragraph and also at
the words preceding and following the unknown word. In addition, if he is not able to
discover its meaning, P1 admitted that he leaves the word and continues reading.
After a while, he returns to the same word and tries the same method again. This
technique has proved to be effective, as P1 has stated. However, if he cannot
discover its meaning by guessing or he is not sure about it, he looks it up in his
dictionary. Moreover, if he has doubts about it even after looking it up, he asks his
teacher about it on the following day. Regarding the phrases he learns, P1 reported
that he asks the teacher about their meanings because the dictionary provides only
the meanings of single words, not the meanings of phrases.

Dictionary use
P1 looks up new lexical items in a small Arabic-Arabic dictionary. When doing so,
he usually looks for the word meaning, and if he finds it he stops reading the
dictionary. However, he is concerned about the measures of the verbs and the usage
of the words. Moreover, P1 pays attention to verb conjugation, transitivity,
intransitivity and plural. He also looks for the antonym of the word only if he does
not find a synonym for it. In the case that he does not fully understand the word
meaning, P1 indicated that he leaves it at that moment and returns to the dictionary
after a while on the same day, reading the same word again.

Note-taking
In the class, P1 records the word meaning in the textbook with a pencil, either beside
the word or beside the line where the word is found. He usually writes down the
meaning of the word, verb conjugation and measure, antonym and plural of nouns.
Moreover, he records the examples provided by the teacher, especially in the case of
verbs, in order to note their transitivity and intransitivity; he noted that this
information is left in the textbook and not transferred to a notebook. When reading a
book out of class, P1 reported that he records the word meaning in the book itself if
the book is his. If the book does not belong to him, he records the word meaning on
loose sheets. Thus, P1 does not have a vocabulary notebook. On these sheets, he
usually writes down the title of the book he is reading and the new words under the
title in no particular arrangement. He records the meanings and plural of only the
difficult words, and the antonym only if the word does not have a synonym.
Regarding short vowels, P1 takes note of them only in the case of some unusual
items. Finally, these loose pages are kept on his desk. P1 reported that he makes use of his notes when writing letters or preparing a speech.

Memorization
P1 reported that to memorize new lexical items he uses them in both spoken and written sentences sometimes repeating these sentences several times. When encountering a previously learnt word, he tries to remember the sentence which he has constructed in order to remember the meaning of the word. On the other hand, P1 does not repeat new words because as he stated he wants to learn their meanings through their context and to make use of them. Moreover, P1 mentioned that some items can be committed to memory immediately after extracting their meaning from the context. On some occasions, P1 translates Arabic words into his mother tongue and uses them in delivering lectures in that language. This technique helps him to commit such words to memory, as he has indicated. Another procedure, which assists P1 to remember new vocabulary items, is associating them with other things. For example, he associated the word X with the title of a book and the word Z with one hadith (the sayings of the Prophet Mohammad).

Practice
P1 makes use of newly learnt words when writing letters to his friends. When facing difficulty in using a given item, he revises his notes concerning the word, also checking whether this word is included in his notes. Furthermore, P1 practises new lexical items by using them in his speech when his teacher requires him to talk about a particular topic in the class. Finally, P1 reported that when talking to Arabs, he tries to pay attention to their way of speaking and their use of words and phrases such as expressions of welcome, and he attempts to practise such phrases when speaking with his colleagues.

Metacognitive strategies
P1 reported that he prepares himself before class by reading through the lesson, especially for the difficult modules such as grammar, and underlining new lexical items; then he asks his teacher about their meanings. However, P1 feels that he can understand the meanings of most words encountered in the textbooks. Moreover, he attempts to discover the meanings of all words that are met in the class either with
the teacher’s help or by consulting the dictionary. On going home, P1 also reviews daily what he has studied in the class. At home, he reads the whole text and revises the words whose meanings he has forgotten. Occasionally, he revises the items learnt during the week after one or two weeks. On the other hand, P1 indicated that he usually does not go back to previously learnt words unless he feels the need to do so. Regarding words learnt outside the curriculum, P1 reported that he revises them only when he feels that he might forget them. He also looks at these loose sheets when writing letters or preparing a speech. In addition, when encountering previously learnt items, he pays attention to them also, trying to discover if they carry their previous meanings or different ones. With respect to his purposes in learning new vocabulary items, P1 stated that he would like to know their meaning, synonyms, antonyms, transitivity and intransitivity in order to make use of such information when teaching in his country. He also aims to know sufficient lexical items to become a writer in Arabic. Finally, P1 reported no difficulties in learning Arabic vocabulary.

Expanding lexical knowledge
P1 reported that he always reads Arabic books, particularly religious books from which he has learnt many new lexical items. In addition, P1 reads newspapers and magazines, concentrating on headlines and short articles and recording some new vocabulary items. He also pays attention to new words included in street signs, recording them on small pieces of paper to look them up at home. As regards listening to the radio, P1 reported that he has learnt many new items through listening to the news and religious programmes and discussions. Nevertheless, he does not at present listen to the radio as much as before. As for watching TV, P1 mentioned that he does watch it, especially the news and some serials and that he has learnt a great many words and phrases, some of which are colloquial. He has also learnt many new items through his interaction with Arabs. Finally, P1 reported that he can understand and speak Colloquial Arabic, which he has learnt from both native speakers and TV, particularly comedy programmes. P1 stated that he does not record colloquial words, but uses them when speaking with ordinary people. Nevertheless, he does not use the colloquial variety much, and can differentiate between standard items and colloquial ones.
Summary

P1 consults different sources to discover the meanings of new words: guessing, the teacher, dictionary and excellent colleagues. When referring to the dictionary, P1 looks usually for word meaning but pays attention to verbs measures, conjugation, transitivity, intransitivity, plural, usage and antonyms. P1 does not have a vocabulary notebook, instead he writes down new items met in the class in the textbook and the items learnt from outside the curriculum on loose papers, recording a lot of information for each item. To memorize words, P1 uses them in sentences trying to remember these sentences when meeting the same items again. He also uses mother tongue translation of some Arabic words in delivering lectures and associates other items with different things as a way of committing them to memory. P1 practises words when writing letters and in talking in class. In addition, he pays attention to native speakers’ speech and their use of words and phrases. P1 does preparation and revises on a regular basis. He is aware of his motives for learning vocabulary. In order to expand lexical knowledge, P1 undertakes various activities: reading (religious books, newspapers), listening to radio, watching TV and interacting with native speakers. Finally, P1 could understand and speak Colloquial Arabic.

6.5.1.2 The vocabulary strategy use of Participant two (P2)

Non-dictionary strategies for discovering the meanings of new words

P2 reported that in the class he often extracts the meanings of new words from the context, and his guessing is often correct as he has stated. He guesses by understanding the meaning of the sentence containing the word and also by looking at the position of the new word within the sentence. When uncertain about his guesswork, P2 asks his teacher to provide him with the word meaning. He asks the teacher about the meaning of the word, the possible changes in the word form which result in changes in meaning, the plural, and its usage only if it is a difficult item. On the other hand, P2 does not ask his colleagues about new lexical items because as he has indicated they may provide him with wrong answers. Outside class, P2 usually asks his teacher about any new items. When meeting a new vocabulary item during reading, he underlines it and takes the book to the teacher in order to let him see the word in its context and consequently provide the right meaning. Furthermore, P2 reported that he always asks one particular teacher because he is an approachable person who always welcomes and encourages P2. Therefore, this teacher is P2’s
main source for discovering the meanings of new items. The dictionary is the second main source. However, P2 stated that he prefers the teacher to the dictionary because the former explains the meaning of the word as it occurs in the sentence, whereas the latter may not contain the required meaning.

**Dictionary use**
P2 has two Arabic-Arabic dictionaries. However, he does not look up a word in both, unless the definition is not clear enough in one dictionary. In that case, he looks up the word in the other dictionary also, because as he has indicated the dictionaries sometimes differ in their explanations. P2 reported that he chose these two dictionaries because they are both easy to use and contain detailed explanations, whereas some other dictionaries use complex language to explain lexical items. Consulting his monolingual dictionaries, P2 usually reads the whole entry, focusing on all information provided. Nevertheless, he pays more attention to the meaning of the word, its synonym, its plural, its inflection if it is an unusual word, and morphological information, than he does to the examples. Finally, P2 has also an Arabic-French dictionary, yet he uses it very little.

**Note-taking**
In the class, P2 records word meanings in the textbook with a pencil, writing above the word in order to see the context when reading. He usually writes down the word’s meaning, and its plural, because he wishes to guard against making a mistake in forming the plural. He also records some noteworthy phrases mentioned by the teacher. This information stays in the textbook. With respect to items learnt from outside the curriculum, P2 records them in a special vocabulary notebook. He puts the items in columns, recording the word and followed by its meaning and sometimes its synonym, but in no particular order. P2 does not write down other information, such as verb conjugation or short vowels, except when the item is unusual. On some occasions, P2 records words that have been learnt from outside the curriculum in textbooks or on loose sheets of paper.

**Memorization**
To memorize new lexical items, P2 repeats them orally several times. He usually repeats them aloud in order to train himself in pronunciation. Some words are
committed to memory as soon as he records them, but P2 sometimes incorporates new items in sentences as a means of memorizing them.

**Practice**

P2 always attempts to use new lexical items when speaking with his teachers in or out of class. His practice consists usually of sitting and talking to them in their rooms, and they sometimes correct him. In addition, P2 tries to practise newly learnt words in his conversations with his colleagues. Nevertheless, he faces difficulties because other students do not understand most of the items he uses whose sources are outside the curriculum. He reported that he sometimes explains their meanings to his interlocutors so that they should know the meanings if he uses such items in the future. Moreover, P2 attempts to make use of new items in his interaction with Saudi students at the University, but only with those who can speak Standard Arabic. Finally, he also makes use of some new words when writing letters or doing homework.

**Metacognitive strategies**

P2 usually prepares himself before class by reading the lesson and underlining new words to ask his teacher about them. He pays attention to every new lexical item encountered in the class. On going home, he reviews these words in order not to forget them. The technique he follows in his revision is to read through the text and to repeat the words together with their meanings until he memorizes them. P2 usually revises the words learnt on the preceding day before studying the new words introduced that day, spending about 30 minutes in doing so. Occasionally, he tests himself by closing the book and trying to remember the word meanings. At the weekend P2 generally revises everything that he has studied during the week including new vocabulary items learnt in or out of class. P2 reported that he follows a plan in learning Arabic vocabulary: he learns new lexical items from outside the curriculum regularly and revises them nearly every day. As P2 has stated he has a wealth of vocabulary. Furthermore, P2 reported that he focuses on written language through books and newspapers and on spoken language through radio. He notices some words, structures and styles in the written language which do not exist in the spoken language and vice versa. P2 declared that he wants to combine both types of language. He pays attention to every new item, trying to discover its meaning even
when not memorizing it. Mentioning his difficulties in learning words, P2 reported that some words are missing from the dictionaries. He resolves this difficulty by asking the teacher. He is also sometimes unable to find the word in position in the dictionary. P2 stated that what he has studied concerning Arabic dictionaries has helped him to overcome this problem.

**Expanding lexical knowledge**

P2 reported that he is not particularly concerned about the words he encounters in class because most of them are known to him. Instead he concentrates on the new items he meets out of class. He usually reads books every day, particularly at night, and records new lexical items as he comes across them. Moreover, P2 mentioned that he learns a considerable number of vocabulary items by reading newspapers and magazines, which he does almost every day. He also listens to the radio twice a day, especially the news. He reported that he enjoyed listening to Arabic radio when he was in his own country. In addition, P2 reads poetry, trying to memorize some poems and so learning some vocabulary items. He also picks up some items used by the teachers themselves, and some from the Holy Quran. Finally, P2 reported that he does not understand Colloquial Arabic well.

**Summary**

P2 has three main sources for discovering the meanings of new lexical items: guesswork, the teacher and the dictionary. He looks up new words in one of the two Arabic-Arabic dictionaries he has, focusing on all information given. P2 follows a systematic pattern in his note-taking strategies. In class, he records word meaning in the textbook, whereas he records words learnt from outside the curriculum in a special vocabulary notebook. In memorization, P2 relies on repetition and also on using new items in sentences. P2 always attempts to make use of newly learnt words in his speaking with teachers, colleagues and native speakers as well as in writing letters and doing homework. Furthermore, P2 follows a very structured and systematic way in preparing himself and reviewing newly learnt words and devotes much time to studying vocabulary. He is also aware of the importance of expanding lexical knowledge and the significance of covering different types of the language. To enlarge his vocabulary size, P2 carries out different actions: reading (books, newspapers, Quran, poetry) and listening to radio.
6.5.1.3 The vocabulary strategy use of Participant three (P3)

Non-dictionary strategies for discovering the meanings of new words

P3 reported that in class the teacher is his main source for discovering the meanings of new items. He usually tries to guess the meaning of the word from the context before asking. Nevertheless, he asks the teacher for confirmation and to get additional information. P3 also chooses to ask an excellent colleague (who speaks a different first language) if for some reason he cannot ask the teacher. When asking the teacher, P3 asks for the meaning of the word. He prefers an explanation of the word meaning to the synonym because the synonym is often approximate, and if the exact meaning is required, then explanation is necessary. Moreover, P3 is concerned to discover the different uses of the word, which the teacher usually mentions in the class. Occasionally P3 looks up new items in the textbook glossary before the teacher’s explanation so as to understand the text. He stated that this glossary suits the students because it employs known words in explaining new ones. With respect to items learnt outside the curriculum, P3 asks his teacher about them or looks them up. He usually asks one particular teacher because this teacher gives students the opportunity each week to ask him about new lexical items learnt out of class. P3 reported that he is usually satisfied with the teacher’s explanation unless it does not convey the exact meaning, in which case he refers to the dictionary.

Dictionary use

P3 consults an Arabic-L1 dictionary in order to make comparisons between Arabic and his first language, as he has stated. He rarely uses an Arabic-Arabic dictionary. When looking up, he focuses on the meaning of the word, which appears in the sentence in question. P3 is not much concerned about other information provided by the dictionary. However, he sometimes pays attention to the short vowels of some items, which are included only in the Arabic-Arabic dictionary.

Note-taking

In class, P3 records word meanings in the textbook so that they are beside the text. He has stated that a word’s meaning in the text may differ from its meanings in other texts, and so he focuses on its present meaning and does not attempt to memorize all its meanings. In addition, he reported that finding word meanings in the textbook is easier than in the notebook. P3 places the word meaning above the text, not above
the word because he does not want to be distracted by word meanings during reading; instead he can look at them only when he needs to. **P3** also writes down items learnt outside the curriculum in the textbooks for reasons of convenience. In recording lexical items, **P3** writes down the meaning of the word and sometimes its synonym; its plural—because the plurals of nouns differ; the infinitive, to know the origin of the word; short vowels but only with unusual items; the antonym if it helps in clarifying the meaning; and word usage in different sentences. He also takes notes of the examples provided by the teacher because this might help in clarifying the meaning. Moreover, **P3** records the mother-tongue equivalents of only some difficult items. Finally, **P3** reported that he takes notes of new words to be used in revision and self-testing. He also observed that note-taking is for him a means of committing vocabulary to memory.

**Memorization**

**P3** reported that the easiest way for him to memorize newly learnt words is to learn them in their context within the text; he reads through the text and examines the meaning and usage of the word. He sometimes repeats the word if it is a difficult one. However, **P3** stated that this technique does not always enable him to commit the word to memory. In that case, such items are revised and repeated after one or two weeks; **P3** repeats them orally and tries to write what he has memorized, including individual words in order to train himself in writing. Finally, **P3** reported that he occasionally makes associations between Arabic words and L1 items that are pronounced similarly in order to memorize them. In addition, he reported that making notes on new items helps him in memorization.

**Practice**

**P3** reported that there are disadvantages in practising newly learnt items when speaking with his colleagues, because this type of interaction is simple and limited and does not allow him to make much use of new words. However, he mentioned that he tries to practise new lexical items by paying particular attention to them during his reading and listening.
Metacognitive strategies

P3 reported that he revises what he has studied in class on returning home every day. At the weekend he tries to revise what he has learnt during the week including new words, repeating those he has forgotten. Moreover, P3 attempts each week to revise the new items that he has learnt during the preceding week. In revision, P3 tries to test himself: he tries to remember the meanings of the new words and, if unable to, he consults the textbook and repeats them. In order to evaluate his learning, P3 attempts to remember the meanings of the new words before reading the text; if he is able to he will not read the text, if not he will read through the text, probably several times. He mentioned that reading the text helps greatly in understanding and memorizing new vocabulary items. Furthermore, P3 reported that he endeavours to discover and memorizes the meanings of all the words he meets in the class. At the same time, he does not limit himself to what he learns in class; he also attempts to benefit from every opportunity to acquire new lexical items. Finally, P3 stated that pronunciation is his main problem, which he tries to overcome by reading the Holy Quran and studying Tajweed and letter articulation, as well as by reading aloud and listening to the radio.

Expanding lexical knowledge

P3 reported that he usually reads Arabic books daily. During reading he does not concentrate on particular words but tries to understand the general meaning, unless it is important to know the meanings of certain words, in which case he looks them up. He looks up the items that are essential to the full understanding of the general meaning, but only after reading, because using his dictionary during reading wastes time. In addition, P3 listens to the radio at night or while driving. He pays attention to those new items that are repeated several times and he looks them up or asks his teacher about them. Other sources of new lexical items include attending lectures outside university, and reading the Holy Quran and Hadith since they are very useful in learning new words and in learning Arabic in general as he has indicated. P3 also pays attention to new items mentioned by the teacher, and picks up some items when speaking with Arabs, although this seldom occurs. Finally, P3 reported that he is not interested in Colloquial Arabic and does not want to learn it because Standard Arabic is the right language for understanding Islam.
Summary

P3 consults different sources to discover the meanings of new items including guessing, teacher, colleagues, textbook glossary and dictionary. Nevertheless, the teacher is the main source for P3. He refers to bilingual dictionary focusing mainly on word meaning. P3 writes down lexical items learnt both in or out of class in textbooks, recording a lot of information, using such notes in revision and self-testing. To memorize words, P3 depends on meeting words during reading the text and on repetition. On the other hand, P3 finds difficulty in practising newly learnt words. Despite the fact that P3 does not make preparation before class, he does regular revision, self-testing, and evaluation of his learning. He is also interested in expanding his lexical knowledge through reading (books, Quran, Hadith), listening to radio and attending lectures.

6.5.1.4 The vocabulary strategy use of Participant four (P4)

Non-dictionary strategies for discovering the meaning of new words

When encountering a new lexical item in the class, P4 first tries to guess its meaning from the context; if he cannot, he asks his teacher about it. He asks the teacher for the meaning of the word as well as the dual and plural of some difficult words and the conjugation of triliteral verbs. P4 reported that he does not ask his colleagues about new items because asking them is useless since they are sometimes not sure of the word meaning. However, P4 occasionally makes use of the textbook glossary. Moreover, he mentioned that he looks up at home some vocabulary items already explained by the teacher in order to know the exact meaning or for confirmation. When meeting a new word out of class, P4 attempts to guess its meaning from the context. If he is uncertain, he looks it up in a monolingual dictionary and sometimes in a bilingual dictionary if there is any ambiguity.

Dictionary use

P4 usually refers to an Arabic-Arabic dictionary because as he has indicated translation is not the same as an explanation in Arabic. If there is still any ambiguity regarding the meaning, he refers to an Arabic-L1 dictionary. When looking up, he does not read all the information given, but focuses on the meaning and the inflection. He also pays attention to the examples of usage because they confirm the particular meaning under consideration and help in knowing how to use the word.
P4's bilingual dictionary, however, is of limited usefulness as it contains only the word and its L1 equivalent.

**Note-taking**
P4 records in his textbook the meanings of new items met in the class but he does not write down the meaning of every new word because some of the items are explained in the textbook glossary. At home, P4 transfers new words and their meanings to his vocabulary notebook, arranging them according to the modules and the lessons. He usually divides each page into two columns, recording the word and its meaning together with its mother-tongue equivalent if needed. P4 also writes down the dual and the plural of nouns, and the short vowels of some unusual items. Moreover, he records the conjugation of triliteral verbs because they are irregular, as well as examples of the usage of some words, putting them within brackets. P4 writes down the prepositions occurring after verbs. He also records the antonym of some words using the sign ? and uses the sign = for the synonym. In addition, P4 sometimes uses red ink to denote certain important information. P4 reported that he puts all the words learnt in class in his vocabulary notebook because as he remarked looking at new items in every textbook takes more time than looking at them in this notebook when necessary (e.g. during exams). As for words learnt outside the curriculum, P4 also records them in the same notebook, writing the title of the book followed by the new words.

**Memorization**
P4 reported that he memorizes some items as soon as they are explained by the teacher. He usually commits new lexical items to memory through repetition. He repeats the word and its synonym, and sometimes its antonym if necessary. Occasionally P4 also repeats the mother-tongue equivalent. He reported that some difficult words require more repetition than other items. Furthermore, P4 associates some concrete words with their shapes in order to commit them to memory. On some occasions, he writes down four or five words on small pieces of paper, which he carries with him and consults, repeating the words. In revision he covers the meaning, trying to remember it, and sometimes asks a colleague to test him.
Practice

P4 always tries to practise newly learnt words when interacting with his teachers so they can correct him when he makes mistakes. He also attempts to make use of new items when speaking with his colleagues, but less frequently than with teachers. P4 reported that he finds it difficult to use new words when speaking with Saudis because his speech with them is simple and limited. In addition, P4 reported that he sometimes practises newly learnt items by writing sentences containing them on paper and letting his colleagues look at these sentences and give their opinions. He also makes use of new items when doing homework.

Metacognitive strategies

P4 prepares himself before class by reading the text and underlining new lexical items—especially those connected with certain subjects—intending to ask his teacher about them. He reported that he ascertains the meaning of every new item encountered in the class even if he does not memorize them all. On going home P4 revises the lesson, including the new words, and transfers them into his notebook. He reported that he knows a great many Arabic lexical items. He also mentioned some difficulties he faces. First, he sometimes forgets the meanings of new items and is also unable to recall them when he needs to while speaking. P4 reported that to overcome this difficulty he revises newly learnt words regularly. Second, he has difficulty in making use of some vocabulary items. To get over this problem, P4 always attempts to practise such words in different ways. Finally, P4 stated that he occasionally finds difficulty in pronouncing some words which are of non-Arabic origin. He reported that to solve this problem he asks native speakers to pronounce such items.

Expanding lexical knowledge

P4 reported that he continually reads Arabic books to educate himself and sometimes to expand his lexical knowledge. He sometimes brings books to class and reads them during break. P4 reported that when reading he does not focus on the individual vocabulary but tries to understand the general meaning of the text even if he does not know the meanings of some words. Moreover, P4 reported that he learns many new vocabulary items from reading newspapers and magazines, focusing also on sentence structure and phrases because as he has stated they differ from what he studies in
class. P4 also listens to the radio, especially religious programmes. He sometimes records programmes on cassettes in order to listen to them again and may write down excerpts if he sees fit. P4 reported obtaining many benefits in respect of knowledge, language, and vocabulary from these cassettes. In addition, he mentioned that he has learnt many items through staying in Saudi Arabia since he asks about the names of many things he sees. Finally, it is worth noting that P4 can speak the Sudanese Colloquial not the Saudi, because he lived in Sudan for a while.

Summary
P4 refers to various sources to discover the meaning of new words. For confirmation purposes, he consults two sources together such as asking the teacher then using a dictionary, or consulting a monolingual dictionary and then a bilingual one. However, P4 always attempts firstly to guess word meaning from context either in or out of class. In looking up, he looks for word meaning, inflection and examples of usage. P4 follows a systematic pattern in his note-taking strategies. In class, he records word meaning in the textbook, then he transfers them to his vocabulary notebook at home next to words learnt from outside the curriculum. His notebook contains a lot of information with a particular arrangement. In memorization, P4 depends on repetition and sometimes makes associations between concrete words and their shapes. To practise newly learnt words, P4 makes use of them in his speaking especially with teachers, and uses them in sentences and in doing homework. P4 also follows a very structured and systematic way in his learning of new words by preparing himself, revising regularly and testing himself. He is also aware of his difficulties. In order to expand his lexical knowledge, P4 reads books and newspapers, and listens to radio and cassettes.

6.5.1.5 The vocabulary strategy use of Participant five (P5)
Non-dictionary strategies for discovering the meanings of new words
In class, P5 tries to guess the meanings of new vocabulary items by looking at the measure and form of the word as well as the context. If he is unable to guess, he looks them up in his small dictionary. Finally, if he is unable to find a word in his dictionary, he asks his teacher. When asking the teacher, P5 asks for the word meaning and the synonym if necessary. He also asks the teacher to provide him with the word’s inflection only if he is unable to discover it by himself or if he is
uncertain. Occasionally P5 asks his teacher to give him the plural of some nouns; he also sometimes asks a few of the most able of his colleagues about particular items. As for certain difficult items already explained by the teacher in the class, P5 looks them up at home for confirmation and to get additional information. Regarding words learnt out of class, P5 often looks them up in his dictionary or sometimes asks his teacher about them. He also asks native speakers about some items of vocabulary he hears.

**Dictionary use**
P5 has two monolingual dictionaries: one small and one big. He uses the small one in class and also at home, and refers to the big one when he wants more information about a particular word. P5 reported that he chose these two dictionaries because his teacher recommended them. He also looks up some items in another monolingual dictionary available in the library where he works. When looking up, P5 reads all the information given because he is interested in the different meanings of each word listed in the dictionary. However, he usually makes comparisons between the meanings provided by the dictionary and the meaning apparent in the text. So he considers each meaning until he arrives at the one required. P5 also mentioned that he pays attention to the inflection, plural and examples. Finally, P5 stated that when looking up a given word he sometimes gets interested in another word; he then looks up this word as well and learns it.

**Note-taking**
P5 has a vocabulary notebook which contains most of the vocabulary items he has learnt in or out of class. In class, he records the word meanings in the textbook, and if he has his notebook with him, he also records them in it immediately after the lesson. At home, he transfers these items, particularly the difficult and unusual ones, from the textbook to the notebook. If he is in a hurry, he transfers them to the cover of the textbook in order not to forget to write them down later in his notebook. In addition, P5 reported that, when reading a book, he writes down the meanings of new vocabulary items in the margin of the page, in order to transfer them into his notebook later on. P5 writes in his vocabulary notebook the meaning of the word, its different usages, its inflection and sometimes its short vowels but only if it is an unusual item. Occasionally he records the antonym if the teacher mentions it, and
puts the word in a sentence if necessary. However, P5 does not follow a particular order when writing new lexical items in his notebook. Finally, P5 reported that he takes notes of new vocabulary items in order to make use of them in revision, and also to use them later in his native country.

**Memorization**
P5 attempts to make associations between words that look similar in order to commit them to memory. He also memorizes new words by using them when speaking and writing because he says practising words helps memorization.

**Practice**
P5 reported that he always tries to make use of recently and newly learnt words when speaking with his colleagues, especially outside the class. He also practises new items while talking to native speakers. P5 stated that he interacts with native speakers frequently, particularly with those who speak Standard Arabic and can correct him. In these interactions, he pays attention to how native speakers use certain items and sometimes asks them questions about the meanings and usages of particular words in order to broaden his knowledge of Arabic vocabulary. Finally, P5 reported that he attempts to make use of some lexical items in writing letters to friends either in his own country or in Saudi Arabia.

**Metacognitive strategies**
P5 reported that he revises the lesson after class every day, reading through the text once or twice and transferring the difficult and unusual words to his notebook. He ascertains the meaning of every new word met in the class, either during or after the lesson. During the weekend P5 does general revision. He also looks at his vocabulary notebook from time to time; as a result, he said he now has a large vocabulary. Finally, P5 has difficulty with inflection and tries to study morphology systematically so as to overcome this deficiency.

**Expanding lexical knowledge**
P5 attempts to read Arabic books, especially religious books, in his free time nearly every day. He reported that he has learnt many vocabulary items through his reading, though he pays attention to the general meaning rather than to individual items. He
also takes the opportunity to read books when he is in the library where he works. Moreover, P5 reported that he learnt many lexical items when listening to religious tapes. He also listens to the radio frequently and his knowledge of sentence structure has benefited from this practice. P5 also stated that he has picked up a considerable amount of new items from his interaction with native speakers, especially those who speak Standard Arabic. Finally, P5 said that he can understand Colloquial Arabic but does not speak it well. He reported that he has learnt many colloquial words through listening to people, and he usually tries to remember the standard equivalents.

Summary

P5 consults various sources to discover the meanings of new words including guesswork, dictionary, teacher, colleagues, and native speakers. He sometimes refers to two sources for confirmation purposes. P5 has two dictionaries focusing on all information provided. P5 writes down all new words he learns in or out of class in a special vocabulary notebook, recording a lot of information for each item. Moreover, P5 always makes use of newly learnt words in his speaking and writing for memorization and practice. P5 also has a structured approach to vocabulary study by revising regularly and by expanding his vocabulary knowledge through reading, listening to radio and cassettes, and interacting with native speakers.

Summary of the major strategies of the successful learners

- Relying on guessing to discover the meaning using different cues.
- Asking excellent colleagues as a source of discovering. In some cases, ignoring colleagues.
- Referring to more than one source to discover the meaning.
- Referring to more than one dictionary.
- Focusing on a large amount of dictionary information.
- Recording vocabulary items learnt outside the curriculum.
- Recording a large quantity of information about new lexical items.
- Assessing the need for particular information.
- Keeping somewhat organized notes.
- Employing large quantity of memorization strategies.
- Practising new items in natural communication with native speakers.
- Revising new items regularly.
- Identifying their problems and trying to deal with them.
- Being consistent in preparation.
- Employing the strategy of self-testing frequently.
- Using various strategies to expand their lexical knowledge.
6.5.2 The less successful learners

Table 6.4 below presents the profiles of the less successful learners participating in the multiple cases.

<table>
<thead>
<tr>
<th>St</th>
<th>Age</th>
<th>Nationality</th>
<th>Job</th>
<th>Mother tongue</th>
<th>Foreign Language spoken</th>
<th>Level</th>
<th>Length of stay in Saudi Arabia</th>
<th>Purpose of learning Arabic</th>
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<td>Ghana</td>
<td>Food dealer</td>
<td>Dagbani</td>
<td>English</td>
<td>4</td>
<td>2½ years</td>
<td>Religious purposes</td>
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<td>7</td>
<td>25</td>
<td>Ghana</td>
<td>farmer</td>
<td>Hausa</td>
<td>English</td>
<td>4</td>
<td>2½ years</td>
<td>To be teacher</td>
</tr>
<tr>
<td>8</td>
<td>29</td>
<td>Bosnia</td>
<td>Islamic herald</td>
<td>Bosnian</td>
<td>Croat</td>
<td>4</td>
<td>2½ years</td>
<td>Religious purposes</td>
</tr>
<tr>
<td>9</td>
<td>25</td>
<td>Pakistan</td>
<td>student</td>
<td>Urdu</td>
<td>Punjabi</td>
<td>4</td>
<td>2½ years</td>
<td>Religious purposes</td>
</tr>
<tr>
<td>10</td>
<td>34</td>
<td>Burkina</td>
<td>dealer</td>
<td>Fula</td>
<td>French</td>
<td>3</td>
<td>1½ years</td>
<td>Religious purposes</td>
</tr>
</tbody>
</table>

Table 6.4 The profiles of the less successful learners

The vocabulary strategy use of the less successful learners is provided below to demonstrate their individual ways of using vocabulary learning strategies.

6.5.2.1 The vocabulary strategy use of Participant six (P6)

Non-dictionary strategies for discovering the meanings of new words

When encountering a new word in the class, P6 looks it up in the textbook glossary; if he does not find it, he asks his teacher. Occasionally he tries to guess its meaning from the context, or by asking a colleague before asking the teacher, especially when the teacher lets the students read the text silently. When asking the teacher, P6 asks for the word meaning, an example, and probably the inflection and plural, yet he sometimes does not understand the teacher’s explanation. As regards asking colleagues, P6 prefers to ask someone who can speak his mother tongue to provide him with the L1 equivalent because he sometimes cannot understand the teacher’s explanation. Out of class, P6 looks up new items he meets in his dictionary. He reported that he sometimes fails to comprehend the dictionary explanation, in which case he asks one of his colleagues or his teacher.
Dictionary use
P6 uses a monolingual dictionary, which he selected because his teacher recommended it; he also finds it easy to use. When referring to it, P6 studies all the meanings of the word; he also pays attention to its plural and inflection as well as examples of usage.

Note-taking
In class, P6 writes down the word meaning in his textbook, recording only the synonym above the text. This minimal information stays in the textbook because, as he has stated, as it is easily accessible, he can consult it frequently. As for words learnt outside the curriculum, P6 does not usually record them and if he does, he writes them in various places. He sometimes learns items by using them without recording. Moreover, P6 occasionally underlines lexical items in a book or other text in order to ask about them.

Memorization
P6 reported that he often does not try to memorize words, since having discovered their meaning is enough for him. Nevertheless, he sometimes repeats new vocabulary items orally several times in order to memorize them, and on occasion he pays special attention to previously learnt words when encountering them again in an attempt to commit them to memory.

Practice
P6 reported that he sometimes attempts to practise newly learnt words when speaking with his colleagues and with native speakers; nevertheless, he finds doing this difficult. P6 also tries to make use of some items when writing letters.

Metacognitive strategies
P6 reported that he does not try to discover the meanings of all the new words met in the class. Before class, he sometimes prepares himself for some modules by reading the rules but not the texts, leaving new words to be explained in class, as his teacher requires. On going home, P6 revises the lesson by reading through the texts and probably studies some words; however, he does not revise the words that he has learnt, nor does he have any goals as regards learning Arabic vocabulary. Moreover,
P6 reported that although he has difficulty understanding the dictionary, he does nothing to overcome this problem.

**Expanding lexical knowledge**

P6 reported that he usually focuses on items in the textbooks; the words that he learns outside the curriculum are very few and he does not record them. Despite this, P6 picks up some items, especially short words, from his reading of books and newspapers and when listening to the radio, but when reading or listening he focuses on the general meaning rather than individual items. Finally, P6 reported that he understands a little Colloquial Arabic but he cannot speak it. Nonetheless, he indicated that he is trying to improve his command of the colloquial variety because Saudi students speak it.

**Summary**

P6 consults different sources to discover the meanings of new vocabulary items including teachers, dictionary, textbook glossary, guessing and colleagues preferring those who speak his language. P6 refers to a monolingual dictionary, looking for different information, and sometimes facing difficulty in comprehending the dictionary explanation. P6 does not follow a systematic pattern in his note-taking strategies. He only records the synonyms of new words taught in the class in the textbook. P6 does not memorize new words, yet he sometimes repeats some items. To practise newly learnt words, P6 uses them in his speaking and writing letters. P6 does not study vocabulary in an organized and systematic way. Finally, he is not interested in studying words from outside the curriculum.

**6.5.2.2 The vocabulary strategy use of Participant seven (P7)**

**Non-dictionary strategies for discovering the meanings of new words**

In class, P7 tries to guess the meanings of new words from the context. If he is unable to, he looks them up in the textbook glossary because he finds it easy to understand. If he does not understand he asks his teacher although he may ask a colleague first. When asking the teacher, P7 asks for the word meaning; he said that the teacher usually provides the students with the synonym and antonym. If he understands the meaning he asks no further questions, but if he does not understand he asks the teacher to give him more information such as the inflection. With respect
to words learnt out of class, P7 discovers their meanings either by looking them up in his dictionary or by asking his teacher. Occasionally P7 asks his colleagues in the accommodation about some items he hears.

**Dictionary use**
P7 has two dictionaries: Arabic-Arabic and Arabic-English. He chose his monolingual dictionary because it is easy to use, yet he has not made any attempt to compare it with others. P7 usually looks up any new item in the monolingual dictionary and if he is unable to understand the exact meaning, he consults the bilingual one in order to discover the English equivalent. When consulting the dictionary P7 pays attention to the synonym, and if he does not understand, he continues reading until he finds the meaning. He tends to ignore other information provided in the dictionary such as inflections and measures.

**Note-taking**
P7 writes the synonym of new words introduced in the class in the textbook above or below the word. He sometimes records its English and mother-tongue equivalents if it is a difficult word. Such information stays in the textbook because he does not have a vocabulary notebook. Furthermore, P7 reported that he does not record words learnt outside the curriculum. When he hears a new word, he only repeats it at the time of hearing it and does not record it.

**Memorization**
P7 reported that he memorizes new words by repeating them orally several times together with their meanings. This is the usual way he memorizes words. During reading, P7 sometimes stops and repeats some items and then continues reading. On some occasions, however, he uses the word in its different forms in sentences in order to commit them to memory.

**Practice**
P7 reported that he would like to practise newly learnt words, but he faces difficulties since he cannot find anyone to practise such words with him. However, he sometimes tries to make use of particular items when doing homework and writing letters and also in composing sentences.
Metacognitive strategies

P7 reported that he attempts to discover the meaning of every new word met in the class. If the teacher does not explain some items, he looks them up at home because the teacher may ask him about these words. P7 does no preparation before the lesson. On the other hand, when he goes home, P7 revises the lesson by reading the text and stopping at new vocabulary items, which he repeats so as to commit them to memory. He also studies new items by putting them into sentences because as he has stated teachers usually ask students about new words on the following day. However, P7 reported that he does not revise such words except before exams, and he so forgets many items he has learnt. Despite this, P7 reported that his purpose in learning vocabulary is to know the meaning of all new items taught in the class and how to use them. To meet this goal, he uses new items in sentences, which he writes on pieces of paper. Moreover, P7 has difficulty in pronouncing some letters. To overcome this problem, he pays particular attention to these letters during his reading and to how other students pronounce them.

Expanding lexical knowledge

P7 reported that he does not learn new lexical items outside the curriculum because he already uses many textbooks and has no time for additional items. P7 does not read books and rarely reads newspapers. However, P7 occasionally picks up items by listening to people in general or his colleagues, focusing on items used widely. Finally, P7 admitted that he does not attempt to speak Colloquial Arabic because this would severely affect his progress in Standard Arabic.

Summary

P7 refers to dictionary (monolingual & bilingual), textbook glossary, teachers, colleagues and guessing as the sources of finding out about new words. When looking up, P7 focuses on the meanings of the words. He writes down the synonyms of new items introduced in the class in the textbook. In memorization, P7 depends on repetition and also on using words in sentences. In addition, he rarely makes use of newly learnt words. Despite the fact that P7 pays attention to every new word met in the class, he does not revise regularly and contents himself with what is taught in the class, thus he seldom learns vocabulary from outside the curriculum.
6.5.2.3 The vocabulary strategy use of Participant eight (P8)

Non-dictionary strategies for discovering the meanings of new words
When encountering a new item in the class, P8 tries to guess its meaning from the context; if he is unable to, he asks his teacher for the synonym and sometimes for the antonyms if the synonym is not clear. P8 also pays attention to the examples provided by the teacher and notes the plural but not inflections and measures because as he has stated he knows now how to deal with them. P8 reported that he does not use the textbook glossary frequently because its explanations are unclear. He also asks his colleagues about some vocabulary items that have multiple meanings, because his teachers focus only on the meanings which are in the text. In addition, he sometimes looks up such words in the dictionary at home for confirmation. Furthermore, P8 mentioned that he prefers to ask a colleague who speaks his first language to provide him with mother-tongue equivalents, and occasionally asks his Bosnian friends who are studying at the University about particular words because he is concerned to translate, especially difficult items, into his mother tongue. As for words learnt out of class, P8 looks them up in his dictionary.

Dictionary use
P8 has two dictionaries: Arabic-Arabic and Arabic-L1. He refers to the bilingual more than the monolingual. The bilingual dictionary usually gives only the L1 equivalents of the words which P8 is concerned about but sometimes provides additional information; P8 pays attention to such information, however, only if the word is important and used widely.

Note-taking
In class, P8 highlights the word under consideration in the textbook in yellow and puts its L1 equivalent in front of it. He focuses on the prepositions after verbs in order to avoid mistakes. In the past P8 transferred such information to his notebook, but he found this time-consuming and that he could benefit from such information being in the textbook when reading the texts. P8 does not have a vocabulary notebook; nevertheless, he has notebooks for some subjects, which contain various kinds of information including words. With respect to words learnt out of class, P8 records them on sheets of paper which he keeps and uses when needed; he writes down the meaning of each word and occasionally its mother-tongue equivalent if
necessary. However, he sometimes discards these sheets when he is sure that he has memorized and can make use of the items. As for verb conjugation, P8 records the past tense with its short vowels to allow him to form the present and the imperative when needed.

**Memorization**
P8 reported that some vocabulary items are committed to memory as soon as they are explained by the teacher or immediately after reading the text. He also memorizes words by writing them on pieces of paper, carrying these with him when going out in order to look at them from time to time. In addition, P8 uses new items in sentences to commit them to memory. He also repeats orally some words he finds difficult to pronounce.

**Practice**
P8 attempts to practise new items by using them in sentences and sometimes records these sentences on paper if the word is difficult. Moreover, he tries to make use of newly learnt words when speaking with his teachers in or out of class and with his colleagues in the accommodation. He also attempts to practise such items when writing letters to his friends. P8 also reported that when he has difficulty in expressing himself while speaking and cannot remember the required word, he consult his dictionary at home in order to revise it. P8 stated that although he knows many items he is unable to use them.

**Metacognitive strategies**
P8 reported that he prepares himself before class if the lesson is difficult or long, or if the teacher asks the students to do so. As preparation, he reads through the text and pays attention to new words, trying sometimes to look them up in his dictionary, though his teachers advise the students to read without stopping at the new words, because, as he says, he cannot read what he does not understand. P8 reported that he tries to ascertain the meaning of every new word encountered in the class either in the class or at home by consulting the dictionary. On going home, P8 sometimes revises what he has studied in the class by reading the text only, although he sometimes revises previously learnt words. Nevertheless, he generally focuses on reading the whole text rather than on individual words in his revision. P8 also studies
his notes on paper that include words from outside the curriculum from time to time, but without any explicit plan; nor has he set himself any goals in his learning of vocabulary. Moreover, he has difficulty in using some words that have multiple meanings. To overcome this difficulty, P8 uses the word in sentences which illustrate its different meanings.

Expanding lexical knowledge
P8 learns some vocabulary items by reading religious books and listening to the radio. However, he neither watches TV nor reads newspapers and magazines. He also pays attention to words that are used frequently by native speakers, looking them up and memorizing them. Finally, P8 reported that although he does not speak Colloquial Arabic he can understand some colloquial words from the context.

Summary
P8 consults different sources to discover the meanings of new items including guessing, teacher, dictionary and colleagues preferring those who speak his language. P8 usually refers to his bilingual dictionary concentrating only on the meaning of the word. P8 is consistent in his note-taking behaviour, since he highlights words in his textbook in the class, whereas he writes down words learnt from outside the class on paper, recording the meaning and mother tongue equivalent for each item. To memorize words, P8 relies on using them in sentences, writing them on paper to look at them in his free time, and repetition. To practise newly learnt words, P8 makes use of them in sentences, in his speaking and in writing letters. P8 makes preparation on some occasions. He also revises new words but not on any regular basis. He has no goals, but he has a difficulty in using words with multiple meanings. P8 tries to enlarge his vocabulary size by reading books and listening to radio and to native speakers.

6.5.2.4 The vocabulary strategy use of Participant nine (P9)
Non-dictionary strategies for discovering the meanings of new words
In class, P9 always asks his teacher about the meanings of new vocabulary items at the end of the lesson or if this is impossible, he asks him on the following day. P9 neither uses his dictionary nor asks his colleagues; however, he may refer to the textbook glossary, or guess some items from their context. P9 reported that the
teacher usually provides the students with synonyms and sometimes antonyms, as well as examples, although the students do not require this from him. Moreover, if he discovers at home that he does not know the meanings of some words presented in the class, P9 asks his teacher about them on the following day, because he understands the teacher's explanation better than the dictionary's. As for words met out of class, P9 looks them up or asks his colleagues about them.

Dictionary use

P9 has an Arabic-Arabic dictionary. He selected this dictionary on his teacher's advice and because it is easy to understand and conveniently small. Although P9 usually looks for the word meaning when consulting the dictionary, he sometimes looks for other information such as inflection but only if he does not understand the word meaning.

Note-taking

In class, P9 writes down the word meaning in the textbook, underlining the difficult words and writing their meanings above them, and sometimes their synonyms and sentences containing them. If he cannot find a space above the word, P9 puts a number beside the word and finds another place on the same page, writing the number and the word meaning. However, he does not record the meanings of easy words. P9 reported that he usually records all the information written by the teacher on the board including antonyms and examples. He also stated that he writes down the singular of each plural but not the vice versa. In addition, P9 mentioned that although he does not record mother-tongue equivalents, he indicates if the given word is available in Urdu. P9 reported that he does not have a vocabulary notebook for general purposes because recording words in notebooks is time-consuming; however, he has one vocabulary notebook for listening comprehension because there is no textbook for this module. He also said that he does not record words learnt outside the curriculum. Finally, P9 reported that he uses his notes for revision.

Memorization

P9 reported that he sometimes memorizes words through repetition during the teacher's explanations and exercises. At home, he memorizes some items when reading texts. With respect to difficult words, P9 stops and repeats them orally three
times in order to commit them to memory; he also tries to link them to their antonyms or the sentences where they were first met. P9 also uses some items in sentences to help him commit them to memory.

Practice

P9 reported that he practises newly learnt words in his conversations with colleagues in the class and they sometimes talk about the meanings and usage of new words. He rarely makes use of new items out of class or with Saudis because, as he says, they speak the colloquial variety. Occasionally he practises difficult new items by putting them in sentences which he writes down.

Metacognitive strategies

P9 reported that he does not focus on every new vocabulary item encountered in the class because there are so many. Some items might occur in the exercises, so he may understand the meanings of three-quarters of the new items in each lesson and this is enough for him. P9 does not look up the items left unexplained by the teacher. Before class, P9 prepares himself only if the teacher asks him to do so. On going home, he revises only difficult subjects such as literature, and some difficult words. He reported that he revises newly learnt words only before exams. Finally, P9 reported no goals and no difficulties.

Expanding lexical knowledge

P9 reported that he focuses on what he studies within the curriculum and does not concern himself with new items from outside the textbooks. P9 does not read books because it requires too much time; however, he listens to the radio, but without paying attention to new items. P9 reported that he neither speaks nor understands Colloquial Arabic. He also stated that he does not want to learn it because it may seriously affect his work with the standard variety.

Summary

The teacher is the main source of discovering the meanings of new words for P9. He also refers to a monolingual dictionary focusing on word meaning, nevertheless, he sometimes does not comprehend dictionary explanation. In class, P9 writes down word meaning in the textbook, recording all information provided by the teacher. In
memorization, P9 depends on repetition and using items in sentences. He also makes
links between some items to their antonyms and examples to commit them to
memory. P9 practises newly learnt words by using them in his conversations with
colleagues and in sentences. P9 makes inconsistent preparation and revision. Finally,
he does not learn words from outside the curriculum.

6.5.2.5 The vocabulary strategy use of Participant ten (P10)

Non-dictionary strategies for discovering the meanings of new words
In class, P10 usually asks his teacher about new items, but if he is unable to, he asks
a colleague who sits beside him after the lesson. If he is unable to ask either the
teacher or his colleague, he looks up the words in question at home. On the other
hand, P10 sometimes tries to guess the word meaning before asking. When asking
the teacher, P10 asks for examples of usage because, as he has stated, he is
concerned about using words in sentences. Regarding words met out of class, P10
looks them up or asks his teacher about their meanings.

Dictionary use
P10 has two dictionaries: Arabic-Arabic and Arabic-French. However, he refers to
the former more often, having selected it on his teacher's recommendation. When
looking up, P10 consults the dictionary entry, focusing on meaning and inflection
and stops when he is sure he understands.

Note-taking
In class, P10 writes down the meanings of new items in the textbook, indicating
them with the device of a small arrow placed either above or under the word. At
home, he transfers the meanings of the words that he feels he may forget to his
notebook, leaving the rest in the textbook. He usually records the word meaning,
inflection and plural. Occasionally, P10 writes down the French and mother-tongue
equivalents of some difficult items. As for words learnt outside the curriculum, P10
writes them down in his vocabulary notebook.

Memorization
Occasionally P10 repeats new words, together with their French equivalents,
speaking them aloud in order to memorize them. He also puts them in sentences to
commit them to memory; moreover, he writes sentences containing some of the words on his board at home and studies them until they are memorized. When encountering a previously learnt word, P10 tries to remember where he first met it and goes back to it to help him confirm his memorization. Thus, he associates the word with the context where he first met it.

Practice
P10 frequently attempts to practise newly learnt words by using them in sentences and also when writing letters to his friends. Furthermore, P10 sometimes tries to make use of new items in his conversations with his colleagues whether in or out of class.

Metacognitive strategies
P10 reported that he tries to discover the meanings of all new items introduced in the class, whether during or after the lesson. However, P10 generally pays attention to new vocabulary items taught within the subjects of Reading and Composition, ignoring words within other subjects. He sometimes prepares himself before class by reading the text without concentrating on new items. After class, P10 also reads the text again. P10 reported no specific goals in learning vocabulary, but admitted experiencing difficulty in using words in sentences.

Expanding lexical knowledge
P10 reported that he focuses on words learnt in the class. Nevertheless, he learns some items through reading religious books and newspapers, listening to the radio, and watching TV. P10 said that he can speak some Colloquial Arabic which he learnt by practising on his own initiative.

Summary
The teacher and a monolingual dictionary are the main sources of finding out about new words for P10. He records word meaning in the textbook in the class, transferring them to his vocabulary notebook at home. To memorize words, P10 relies on repetition and on using them in sentences, and he sometimes writes them on his board to look at them. To practise, P10 makes use of words in his speaking, in writing letters, and in sentences. P10 makes some preparations but no reported
revisions of words. P10 generally focuses on what is taught in the class, yet he picks up some new items from different sources.

Summary of the major strategies of the less successful learners

- Relying on the teacher to discover the meaning.
- Using the combination of repetition and using words in sentences to memorize words.
- Employing the strategy of practising with colleagues as a major practice strategy.
- Practising words by using them in sentences.
- Revising irregularly.
- Ignoring some new items.
- Being able to state their criteria in choosing vocabulary items to be learnt.
- Focusing more on classroom vocabulary items.

6.6 Comparison and Discussion

In the previous section a detailed description has been given of the vocabulary strategy profiles of the two groups of learners. In this section the two groups will be compared using the seven general categories of vocabulary learning adopted in this study. The focus of this comparison will be on the differences between the two groups in their use of vocabulary learning strategies; however, the general similarities between the two groups will not be overlooked. In addition, some general trends in strategy use will be discussed and even certain strategies used by individual learners will be highlighted. An important point needs to be made here. The backgrounds of the two groups of learners and their effect on strategy use should be taken into account. Tables 6.3 and 6.4 show that three of the successful learners are teachers, whereas three of the less successful learners are manual workers.

6.6.1 Non-dictionary strategies for discovering the meanings of new words

As mentioned previously (6.4), in order to discover the meanings of new vocabulary items the participants in the multiple cases seem to follow a structured approach consisting of a chain of strategies. It seems that students do not turn to the next strategy unless the first strategy used does not provide the required information (see Table 6.1). However, there are major differences between the two groups of learners regarding this aspect of vocabulary strategy use.
6.6.1.1 The strategy of guessing

One of the major differences between the two groups of learners can be seen in their use of the strategy of guessing (strategy level). It seems that guessing is the main source of discovering the meanings of new items for successful learners. On the other hand, only two of the less successful learners (P7 & P8) reported that they used this strategy as a first option. It should also be noted that three of the successful learners (P1, P2 & P5) were able to describe their guessing techniques, enumerating the cues they use to help them in guessing (substrategy level), as can be seen in the following two examples:

R: How do you guess the word's meaning from its context? P1: I try to understand the idea of the paragraph and I look at the words which precede and follow the word.
R: You said you guess the meanings of new words from the context, how do you guess? P2: I look at the sentence and try to understand its meaning... the position of the word in the sentence also helps me to discover its meaning.

By contrast, none of the less successful learners reported that they knew how to guess or were able to provide examples of the cues they used in guessing. Moreover, all the successful learners in the present study have other ways of discovering word meaning if they are unable to make correct guesses. This shows their awareness of the limitations sometimes of the strategy of guessing. Further, some successful learners (P1 & P2) reported a high level of confidence in their guesses; this is very important. Another point related to guessing concerns the strategy of repeated guessing (substrategy level) employed by P1. He reported that he makes two attempts to guess some difficult items.

The low use of guessing by the less successful learners may be due to their limited L2 proficiency. It has been suggested that the extent to which learners employ the strategy of guessing depends largely on their proficiency. It is believed that contextual guessing might be especially helpful to students with higher proficiency (Sokmen 1997). High-proficiency learners are much more likely to make use of this strategy than low-proficiency ones. Further, they are more likely to make successful guesses (Morrison 1996), since familiarity with a large number of words is a prerequisite for successful guessing (Laufer 1997b).
This result is congruent with findings in the literature (Schouten-van Parreren 1992; Gu 1994). The importance of guessing has been widely discussed, it is considered to be by far the most important vocabulary learning strategy (Nation 1990; Nation & Waring 1997).

6.6.1.2 The strategy of asking the teacher
Although most participants depend on the strategy of asking the teacher (strategy level) as a main source of discovering the meanings of new items (two less successful learners (P9 & P10) start by asking the teacher, and seven other learners, four successful and three less successful, use this strategy as the second source of finding out about new items), it seems that the less successful learners are more dependent on the teacher than the successful ones (see Table 6.1). However, both groups are very similar in respect of requesting information from the teacher. Information on word meaning, synonym, antonym, usage, plural and inflection are mainly required by learners when asking the teacher about new vocabulary items. But some successful learners differ slightly from their peers in the questions they ask about certain aspects of vocabulary. For example, P2 asks the teacher about possible changes in word form which lead to changes in meaning; P3 asks about the different uses of a word, and P4 asks about the dual of some items and the conjugation of trilateral verbs. This shows that these successful learners have a good meta-knowledge about vocabulary.

Presumably, the adequate language knowledge of the successful learners gives them the confidence to be relatively independent, whereas the limited knowledge of the less successful learners constrains them to rely more on the teacher. In addition, the teaching practice followed at ITANA may lead students to be dependent on teachers (2.2.2.4). During my observation I have noticed that most teachers asked students if they have any questions regarding new words, and they also give a lot of time to dealing with new words.

6.6.1.3 The strategy of asking colleagues
One interesting finding to emerge from the comparison between the two groups concerns their strategies in asking colleagues (strategy level). Two strategies used by successful learners have been identified. The first is the strategy of consulting
excellent colleagues (substrategy level) used by P1, P3 & P5 as a means of discovering the meanings of new lexical items. The second is the strategy of ignoring colleagues (substrategy level) employed by P2 and P4. This strategy is justifiable since relying on colleagues is vulnerable to errors, as can be seen in the following statement made by one successful learner:

P2: I do not ask them because they are like me; we are all trying to know the meanings. I may ask one colleague who gives me the wrong answer and I do not want this. I want either the teacher or the dictionary.

By contrast, the less successful learners reported that they ask colleagues, but did not specify the proficiency level of these colleagues. Two of them (P6 & P8) ask colleagues who speak their first languages (substrategy level). What is more, P6 resorts to such a colleague when he comprehends neither the teacher’s explanation nor the dictionary explanation. P8 also turns to a colleague who speaks his mother tongue when encountering items with multiple meanings. Resorting to other students seems to be an unwise decision in the above cases. It may be important for students to know the L1 equivalents for some difficult items; the argument concerns the source from which they find out about the L1 equivalent. It seems that a bilingual dictionary is generally more reliable than colleagues. Thus, resorting to the most suitable source to find particular information is very important. However, both participants (P6 & P8) reported that they may consult a dictionary or asking the teacher in the above two cases, but it appears that these sources are not their first options.

The less successful learners seem, therefore, unable to choose the most suitable source of particular information in particular circumstances. This finding seems to be consistent with the features of poor students in the literature. Porte (1988), for example, found that his poor subjects demonstrated less suitable responses to a particular task. Thus, the strategy of asking colleagues cannot in itself be regarded as a bad or ineffective strategy, but the circumstances in which it is used determine its suitability and effectiveness. Politzer and McGroarty (1985) warn that strategies should not be considered inherently good or bad, but are dependent on the context in which they are used.
6.6.1.4 The strategy of referring to more than one source

One of the features characteristic of the successful learners is their use of the strategy of referring to more than one source to find out about a particular item. Three successful learners (P3, P4 & P5) reported using this strategy. P3 always guesses the meanings of new words from the context then asks his teacher for confirmation or to get additional information. P3 is probably aware that inferring word meaning is an error-prone process (Sokmen 1997), and so he consults further sources to monitor his guessing. Both P4 and P5 look up at home some difficult items already explained by the teacher in the class for confirmation or to obtain further information. So they evaluate the difficulty of new items and determine which items need further consultation. It seems also that these successful learners are aware that every source has its limitations and that to gain a clearer and more complete idea of the meaning and usage of a given word, one has to consult various sources. However, only one less successful learner (P8) makes use of this strategy. Regarding items with multiple meanings, P8 looks them up at home or asks those among his colleagues who speak his first language.

Furthermore, the successful learners are characterised by their awareness of particular aspects of vocabulary learning. For example, P1 is aware that the dictionary provides only the meanings of single words, not the meanings of whole phrases. P2 is aware of the importance of context, since he underlines new items met in reading and brings the book to his teacher in order to discuss the word in its context. He is also aware that the dictionary may not contain all the meanings of a given item. P3 is aware of the limitations of using synonyms to define words. P3 is also aware that the textbook glossary employs known words to explain new ones.

6.6.2 Dictionary use

The results of this study indicate that monolingual dictionaries seem to be used much more extensively than bilingual dictionaries by both groups of learners. In addition, a closer look at the types of dictionaries used by the participants in this study reveals that all the monolingual dictionaries are designed for native speakers.

This dominant use of monolingual dictionaries by the participants in the present study may possibly be attributed to their high proficiency level. It has been believed
(Carter 1987b; Taylor 1990) that bilingual dictionaries are more generally employed in the initial stages of learning a language and that as proficiency develops, greater use is made of monolingual dictionaries. Regarding the use of monolingual dictionaries that are intended for native speakers, it may simply be due to the shortage of Arabic dictionaries designed for non-native speakers (4.2.2). Another possible reason is teachers’ advice. Some learners (P5, P6, P9 & P10) said that they chose their dictionaries according to their teachers’ recommendations, as can be seen in the following two examples:

R: Did you choose it yourself or because of somebody else? P9: It was chosen by the teacher.
R: Why did you choose this dictionary? P10: The teacher X said to us that we should buy this dictionary because it is useful.

One notable finding of this study is that none of the participants, except P5, uses dictionaries in the class, largely because the practice is discouraged by AFL teachers. Another explanation for this finding may be the teacher-fronted style of TAFL classes. Learners might feel that if they spend time looking up a word they might miss some important information provided by the teacher.

Having discussed the types of dictionaries used by the participants, in the following sub-sections the major differences in dictionary use between the two groups of learners will be highlighted. In carrying out this comparison, I examine the looking-up process from various perspectives.

6.6.2.1 The number of dictionaries referred to
One major difference between the two groups lies in the number of dictionaries they keep and refer to. Generally speaking, the successful learners refer to more dictionaries than the less successful ones. P2 and P5 refer to three dictionaries (monolingual and bilingual) though they may not consult them all for each item, and they refer sometimes to two monolingual dictionaries to find out about a single item. P3 and P4 have two dictionaries: one monolingual and one bilingual. P1 is the only successful learner who keeps only one dictionary, which is monolingual. These successful learners may be aware of the differences between dictionaries and of the limitations of some dictionaries. To illustrate this point, the following extract has been chosen from the data:
P2:... because the two dictionaries differ in their explanations of a word.

Of the less successful learners, P7, P8 and P10 have two dictionaries: one monolingual and one bilingual. P6 and P9 have only one monolingual dictionary. Despite the fact that some less successful learners have more than one dictionary, they usually use only one to find out about a particular item. P7 is the only exception to this trend since he consults his Arabic-English dictionary when he does not understand the meaning given by the Arabic-Arabic dictionary.

6.6.2.2 The amount of information looked for
A marked distinction between the two groups can be seen in the amount of information looked for. The successful learners are distinguished by their focusing on more information than their less successful peers. For example, P2 and P5 read the whole entry of the dictionary, focusing on all the information provided. P1 also looks for a large amount of information, even if he does not read the whole entry. In contrast, the less successful learners seek out less information than their successful counterparts. Most less successful learners focus on word meaning when looking up, as can be shown in the following example:

R: Do you care about the examples provided by the dictionary? P9: No, only the meaning.

Some other less successful students in this study do read other information in addition to the meaning but only in connection with particular items, as can be seen in the following extract from the interview with P8:

P8: If the word is used widely I care about all the information provided. R: You mean if the word is important you read all the information, and if it is not important you read only the meaning? P8: Yes, only the meaning in order that I understand the meaning which appears in the text.

The finding that the successful learners use more dictionary information than the less successful ones is in line with that of Ahmed (1988) that poor learners use less dictionary information than good learners.

6.6.2.3 Dictionary use strategies associated with individual successful learners
An examination of the dictionary use strategies reveals that certain strategies are associated with successful learners. First, P1 reported that if he cannot understand the dictionary explanation he puts the dictionary aside for a while then looks up the
word again. P1 asserts that this strategy works very well for him, thus showing that he is able to evaluate its effectiveness. Second, P5 makes a comparison between the required meaning and the meanings listed in the dictionary. Third, P5 reported that when looking up a word he may become interested in another word and look up this word as well in order to learn it. Fourth, P3 makes a comparison between Arabic and his native language when looking up an item.

Finally, two general observations have been noted regarding dictionary use. First, all the participants use their dictionaries for decoding purposes. Only P8 reported one case in which he referred to a dictionary for encoding purposes. Thus, there is a tendency to regard dictionaries as decoding instruments only. Second, all the participants' bilingual dictionaries are L2-L1 ones; none of them own an L1-L2 dictionary.

6.6.3 Note-taking

6.6.3.1 The place of the notes
One general finding shows that all participants record the meanings of new items met in the class in their textbooks, whether above, under, or beside the word, or above the text, and most of them leave the words on the textbook page. Only three learners-two successful (P4 & P5) and one less successful (P10)- transfer new words from textbooks to notebooks.

The results also revealed that only four participants-three successful (P2, P4 & P5) and one less successful learner (P10)- have vocabulary notebooks. It seems that most of the students participating in this study are not interested in keeping vocabulary notebooks. On the other hand, two participants-one successful (P1) and one less successful (P8)- use loose sheets of paper to record particular vocabulary items.

6.6.3.2 The content of the notes
One of the major distinctions between the two groups of learners lies in their recording of lexical items gathered from sources other than the classroom. The successful learners are clearly distinguished from their less successful peers by their practice of recording items learnt outside the curriculum, since all of them reported
recording such items. By contrast, only two less successful learners (P8 & P10) reported recording items learnt outside the textbooks.

Another marked difference between the two groups concerns the amount of information recorded. It appears that the successful learners write down much more information than that recorded by the less successful ones. A close examination of the information recorded by both groups of students shows that three less successful learners (P7, P8 & P10) write down the L1 equivalent, and two of them (P7 & P10) write down the English and French equivalents side by side with the L1 equivalents; this is an interesting practice. A possible explanation is that these two learners are proficient in English and French, which are respectively their second languages. On the other hand, two successful learners (P3 & P4) write down the L1 equivalent only when needed. It seems that the less successful learners rely on L1 translation more than the successful learners. This result is in agreement with findings in the literature (Ahmed 1989; Kayaoglu 1997).

Another issue related to information recording is assessing the need for particular information. It appears that the successful learners are particularly aware of their information needs for every new item. Thus, they are marked by their ability to assess their need for particular information before recording. For example, all the successful learners reported that they take note of short vowels only if the item is unique; in other words they assess the uniqueness of the item in respect of its voweling before recording. P3 records an antonym only if it helps in clarifying the meaning. P1 records the antonym if there is no synonym. As an extreme case, P9 records all the information written by the teacher on the board without assessing his needs. This issue is very important in that it reveals that successful learners evaluate the essential information needed for each item.

6.6.3.3 The organization of the notes
A major difference concerns the arrangement of notes. Three successful learners (P1, P2 & P4) seem to adopt a systematic approach to arranging their notes. P1 reported that when reading a book out of class, he records the word's meaning in the book itself if the book is his. If the book does not belong to him, he records the word's meaning on loose sheets. On these sheets, P1 usually writes down the title of the
book he is reading and the new words under the title in no particular arrangement. P2 records items learnt from outside the curriculum in a special vocabulary notebook. He puts the items in columns, recording the word followed by its meaning and sometimes its synonym, but in no particular order. P4 transfers new words and their meanings from his textbook to his vocabulary notebook at home, arranging them according to the modules and the lessons. He usually divides each page into two columns, recording the word and its meaning and its mother tongue equivalent if needed. As for items learnt from outside the curriculum, P4 reported that he writes the title of the book and the words underneath in his vocabulary notebook. On the other hand, none of the less successful learners reported organizing words in any particular fashion.

Even though the successful learners keep more organized notes than the less successful ones, their organization seems to consist of making simple lists in chronological order, sometimes they merely compile word lists.

Moreover, the successful learners are characterised by their awareness of the purpose of their behaviour. For example, P2 and P3 reported that they write words in the textbook in order to be able to refer back to the text, although P3 added that he puts them above the text in order not to see their meanings while reading. P4 puts all new words in one notebook because looking for words in every textbook is time-consuming. P1 records examples of the usage of verbs to illustrate their transitivity and intransitivity. By contrast, two less successful learners, P8 and P9, said that they do not transfer words into notebooks because it is time-consuming. Finally, it appears that the successful learners are more aware of the purpose of the note-taking process. Three of them (P1, P3 & P5) reported that they take notes for revision, self-testing, committing words to memory and to be used in their own countries. In contrast, only one less successful learner (P9) mentioned his reason for taking notes: that they would be used in revision.

6.6.4 Memorization
The results demonstrate that the successful learners generally use more memorization strategies than their less successful counterparts. The successful learners use 16
strategies to commit words to memory whereas the less successful use only 10 strategies (see Table 6.5 below).

<table>
<thead>
<tr>
<th>The successful learners</th>
<th>The less successful learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use in speaking</td>
<td>Repetition</td>
</tr>
<tr>
<td>Use in writing</td>
<td>Use in sentence</td>
</tr>
<tr>
<td>Teacher explanation</td>
<td>Write on one's own board</td>
</tr>
<tr>
<td>Repetition</td>
<td>Teacher explanation and exercises</td>
</tr>
<tr>
<td>Writing on paper to carry and repeat</td>
<td>Read text</td>
</tr>
<tr>
<td>Self-testing to remember</td>
<td>Write on paper to carry and revise</td>
</tr>
<tr>
<td>Read text</td>
<td>Pay attention to previously-learnt words</td>
</tr>
<tr>
<td>Take notes</td>
<td></td>
</tr>
<tr>
<td>Use in sentence</td>
<td></td>
</tr>
<tr>
<td>Guessing</td>
<td></td>
</tr>
<tr>
<td>Use L1 translation of Arabic words in speeches</td>
<td></td>
</tr>
<tr>
<td><strong>Association techniques</strong></td>
<td><strong>Association techniques</strong></td>
</tr>
<tr>
<td>Associate words with other things</td>
<td>Associate words with antonyms</td>
</tr>
<tr>
<td>Associate words with their sentences</td>
<td>Associate words with their sentences</td>
</tr>
<tr>
<td>Associate words with L1 items similar in pronunciation</td>
<td>Associate words with their context</td>
</tr>
<tr>
<td>Associate concrete words with their shapes</td>
<td></td>
</tr>
<tr>
<td>Associate words of similar appearance</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.5 Memorization strategies used by both groups

A closer look at Table 6.5 above reveals that 7 strategies apart from association strategies (use of words in speaking, use of words in writing, self-testing, taking notes, guessing, use of L1 translation of Arabic words in speech) have been used only by the successful learners. On the other hand, 2 strategies (writing words on a board and paying attention to previously learnt words) have been used only by less successful learners. 5 strategies (repetition, use of words in sentences, teacher explanation, reading text, writing words on paper) have been used by both groups.

Regarding the strategy of paying attention to previously learnt words used by P6, he mentioned that he often does not try to memorize new vocabulary items. Thus, he probably compensates by paying attention to previously learnt words.

This finding, that successful learners use more strategies than less successful ones, is consistent with findings in the literature. In an overview of strategy research, O'Malley and Chamot (1990) found that more effective learners used a greater variety of strategies than students who were designated as less effective.
A closer look at Table 6.5 above reveals that the successful learners use more association strategies than the less successful ones. 5 association strategies have been employed by the successful learners (associating the word with its sentence, associating the word with different things [personal interaction], associating the word with an L1 item similar in pronunciation, associating the word with another Arabic word of similar appearance, and associating concrete words with their shapes) and 3 used by the less successful ones (associating the word with its antonym, associating the word with its sentence; and associating the word with the context where it was first met). Further, all the successful learners except P2 make associations but only two less successful learners (P9 & P10) make them.

Some of these association strategies are similar to those reported by Cohen and Aphek (1980, 1981) and identified by Erten (1998). The effectiveness and value of association strategies in enhancing the retention of new vocabulary items has been widely recognized in the literature (Cohen & Aphek 1980, 1981; Lawson & Hogben 1996; Gu & Johnson 1996; Erten 1998).

A close examination of the association strategies used by each group reveals that two of the successful learners (P3 & P5) make associations between new words and words that look or sound similar; thus they relate new items to relevant familiar items. P1 makes associations between new words and his personal experience. On the other hand, two of the less successful learners also make associations, but these are not with relevant previous items (P9’s associating words with antonyms is an exception). This finding is generally in line with findings in the literature (Ahmed 1989; Schouten-van Parreren 1992; Gu 1994) that good learners are more able to relate new words to old ones.

One point needs to be made here. While P5 makes associations according to physical appearance and P3 makes them according to sound similarities, only P9 makes associations according to meaning. Taking the high proficiency level of the participants of the study into account, this finding is in clear contrast to Henning (1973) who found that learners in the initial stages of language learning stored words
in their memory according to the sound of the words, and high-level proficiency learners stored words according to their meaning.

6.6.4.2 Repetition

One major finding is the students' dependence on repetition: all the participants, except two successful learners (P1 & P5), rely exclusively on repetition to memorize words. However, the data gathered seem to indicate that this repetition is mechanical and does not involve deep level processing, and that oral repetition is used extensively by both groups. The difference between the successful and less successful learners in this respect may, however, lie in how much repetition they practise. As will be shown later (6.6.6.1), the successful learners are characterised by their regular reviewing of the items that have been learnt. So, structured reviewing, which entails reviewing at different intervals might help the successful learners to retain words in their long-term memory and to retrieve them easily and automatically when required (Oxford 1990).

The high use of repetition by the participants in this study can reasonably be attributed to the teaching style followed in the TAFL context, in which teaching practice is based on rote learning. It is widely held that the objectives of the particular language course and the teaching methods used in the classroom have an impact on students' strategy use (Bialystok 1985). Further, TAFL tests emphasise this aspect of learning, and McDonough (1995) suggests that tests and testing procedures can influence the strategies students choose and use. However, this result confirms the widespread finding that language learners use repetition frequently (Ahmed 1989; O'Malley & Chamot 1990; Lawson & Hogben 1996; Gu & Johnson 1996; Schmitt 1997a; Erten 1998).

The findings of the present study also show a particular pattern of strategy combination consisting of repetition and using words in sentences. This pattern is associated with the less successful learners since four of them (P7, P8, P9 & P10) make use of it, whereas only one successful learner (P2) makes use of this combination. It should be borne in mind that all of these less successful learners also employ the strategy of using words in sentences as a practice strategy (6.6.5.3). On the contrary, the two successful learners (P1 & P2) who reported employing the
strategy of using words in sentences (P1 reported that he uses new items in sentences to commit them to memory but does not use repetition) did not use this strategy (using words in sentences) to practise new items. This combination, however, shows a complementary relationship between decontextualised learning from word lists and contextualised learning (Nation & Waring 1997).

One interesting finding is that students reported some activities which help in memorization, such as guessing, teacher's explanation, and reading text. Such activities, however, are not carried out for the purpose of memorization. P1 reported that he sometimes memorizes words as soon as he guesses their meanings. This is interesting since it confirms the view that guessing leads to better retention (Gu & Johnson 1996). Finally, the strategy employed by P1 of the use of the L1 translation of some Arabic items in speeches is noteworthy.

6.6.5 Practice

The results indicate that both groups of students make efforts to practise newly learnt words. However, the data of the present study show that the successful learners appear to use practice strategies more frequently and use a greater variety of strategies than their less successful peers; they are also more willing to exploit any opportunity to make use of new words. This result could be attributed to their awareness of the importance of putting words into practice, without which their mastery of new items would not be adequate. To illustrate this point, the following extract was chosen from the data:

P4:..... our problem lies in the usage of the words. We may know the meaning of a particular word, but sometimes we cannot make use of it. So, even if we know a word's meaning, it is very possible to make mistakes in word usage.

In addition, despite their limited efforts to make use of recently learnt items, the less successful learners (P6, P7 & P8) seem to face major difficulties in carrying out this practice, as they stated explicitly. It seems that what the less successful learners mean here by practising is using words in natural interaction (see 6.6.5.1 below), a strategy which entails specific skills which the less successful learners might not have. Gu and Johnson (1996) found that the use of activation strategies was ranked relatively low by their subjects, claiming that this is not surprising given the extent to which such strategies demand the management of learning time and effort. Thus, the
successful learners in this study probably devote more time and effort to making use of newly learnt words.

When comparing this result with other findings in the literature, it appears to be incompatible with those of Ahmed (1988) but is consistent with those of Sanaoui (1992). Ahmed found that poor learners did not seem to practise new items. The less successful learners in this study generally make some attempt to practise new lexical items. On the other hand, Sanaoui found that one of the five aspects that distinguished between the two approaches (structured and unstructured) was the extent to which students practised using the words they were learning outside their course. So the difference lies in how much they try to practise. This result also corroborates one of the main characteristics of the good learner identified in the studies of the ‘Good Language Learner’: willingness to practise (e.g. Naiman et al. 1978).

6.6.5.1 The strategy of practising naturalistically

The most striking distinction between the two groups is to be found in their efforts to practise new lexical items when speaking (strategy level). The successful learners appear to be characterised by their attempt to make use of new items in their interaction with native speakers including teachers (substrategy level). Four successful learners (P1, P2, P4 & P5) reported that they interact frequently with native speakers and pay attention to their speech, as can be seen in the following example:

P1:.... When I hear a native speaker talking, I pay attention to his speech and how he uses words and phrases...

By contrast, only two less successful learners (P6 & P8) reported using new words in their conversations with native speakers. Nevertheless, they stated that they generally find difficulties in using new words (see 6.6.5 above). One point needs to be made here. Choosing the interlocutor is a very important factor in using new Arabic items. The successful learners seem to select as their interlocutors teachers or native speakers who can speak Standard Arabic, which highlights their awareness of the diglossic nature of Arabic (2.3.1). The following extract illustrates the point:

R: You said you talk to Arabs?
P5: Yes, but they should be teachers or someone who can speak Standard Arabic, not ordinary people.
This also shows their attempts to compensate for the limited practice opportunities offered in the TAFL context (4.2.5), since interacting with ordinary people does not guarantee practising Standard Arabic or at least Educated Spoken Arabic because most people speak Colloquial Arabic (2.3.1). On the other hand, the low use of this strategy by the less successful learners might be attributed to their difficulty in finding a person who can speak Standard Arabic or Educated Spoken Arabic, as can be seen in the following extracts:

R: When you learnt a new word, do you try to use it? P7: Yes, but I cannot find anyone to use it with. R: What about Saudis? P9: They do not understand us because they speak the colloquial variety.

This shows that the less successful learners do not make sufficient efforts to meet native speakers who are able to speak Standard Arabic. It may also be because of their limited proficiency which reflects on their confidence to interact with native speakers who can speak Standard Arabic. Such confidence is important because most speakers of Standard Arabic are educated people. In addition, as part of their interaction with native speakers, the successful learners try to mix with their teachers out of class, as shown in the following example:

R: Where do you practise new words with teachers? In or out of class? P2: In the class and sometimes in their rooms, since I sit with and talk to them.

Mixing with teachers provides a good opportunity to practise Standard Arabic. This shows that teachers are a major source of Standard Arabic input available for students in the TAFL context. What is more, some successful learners such as P4 appear to employ this strategy to compensate for the limited opportunity to interact with native speakers. Interaction with teachers might provide feedback about whether the learner is using the new word correctly, and also the teacher probably gives comments on the students’ speech, not in a threatening, corrective manner but in a supportive, nonjudgmental way, since it occurs outside class. Some successful learners (P2, P4 & P5) explicitly stated that they interact with teachers in order to benefit from their corrections:

P4: In any dialogue in or out of class.... especially with teachers because they correct me. P2:.... the teacher also corrects me when I make a mistake.

By contrast, the less successful students do not appear to interact with teachers outside class as intensively and frequently as the successful learners do. Thus, the successful learners, unlike the less successful ones, appear to take advantage of the
teacher as one of the main sources of input of Standard Arabic. The less successful learners' avoidance of interaction with teachers outside class can possibly be attributed to the following reasons. First, it may be because they feel embarrassed to converse informally with their teachers, since the relationship between students and teachers in the TAFL context is rather formal (2.2.2.4). Second, they might not have the confidence to go to speak with teachers in their rooms due to their limited proficiency. Third, their relationship with their teachers may be not good enough to allow them to go their rooms, also because of their low proficiency. High proficiency, on the other hand, allows students to build up good relationships with teachers, as can be seen in the following statement made by one successful learner about one of his teachers:

P2: He is a very simple person and he welcomes and encourages me to ask any question I may have.

Another possible reason is that the less successful learners might be worried about making mistakes when speaking with their teachers. By contrast, the successful learners seem not to be afraid of making mistakes, since they reported that they interact with teachers in order to get feedback and correction.

This result, that successful learners employ the strategy of practising naturally more than the less successful ones, is consistent with findings in literature (Bialystok 1981; Huang & Naerssen 1987; Green & Oxford 1995, Embi 1996). The strategy of practising naturally is one of the most essential learning strategies and is regarded as important in allowing learners to reach a high proficiency level in the target language, and a good deal of attention has been devoted to it and its instructional manifestations (Oxford 1990). Therefore, it may be that this strategy is one of the major ways by which the successful learners in this study attain a high level of proficiency in Arabic. Conversely, their high proficiency level probably provides them with the necessary confidence to approach native speakers.

6.6.5.2 The strategy of practising with colleagues
The results also demonstrate that both groups practise words when speaking with colleagues. Nevertheless, the successful learners do not seem to depend on this strategy as a major practice strategy. They are probably aware of the limitations of
practising words when talking to peers. The following comments made by some of the successful learners reflect the above point:

P3: ... our speaking with each other is simple; it involves repeating the same words and does not allow for making use of many of the new words we learnt.

P2: ...... because other students do not know some of the words I use.

P4: ...... because speaking with colleagues is not useful conversation, we talk without taking account of Arabic grammar.

The less successful learners' use of this strategy may be because they want to compensate for their lack of interaction with native speakers (6.6.5.1). This strategy also may not need such a degree of effort and confidence as the strategy of practising naturalistically requires. Moreover, practising with partners may provide the less successful learners with constant encouragement, self-confidence and mutual feedback. It also takes place in relative safety and a highly familiar environment, whereas practising with native speakers involves considerably stressful real-life communication (Thompson 1987), which the less successful learners might be unwilling to risk.

6.6.5.3 The strategy of practising words by using them in sentences

The results of the study also demonstrate that the less successful learners are marked by their use of words in sentences, which they construct by themselves. Four learners (P7, P8, P9 & P10) reported using this strategy. It seems that this group of learners uses this strategy for two purposes: to memorize (6.6.4) and to practise. Only one successful learner (P4) reported employing this strategy. However, P4 differs slightly from the less successful learners in that he writes down these sentences on paper and lets his colleagues look at them and give their opinions. The extensive use of this strategy by the less successful learners could be attributed to their awareness of the importance of putting words into context, and probably the easiest way for them to do this is by using new vocabulary items in sentences. Further, it could be due to the teaching practice followed in ITANA, in which students are required to put words into sentences in class. The following comment by P7 reflects the above issue:

P7: In class, teachers always ask students about new words and about their usage in sentences, so I always pay attention to this.
The limitation of this strategy lies in that it involves practising at the sentence level rather than in the wider context to be obtained from participating in natural communication. It is also monologue not dialogue.

6.6.5.4 Practice strategies associated with individual successful learners
In this sub-section, I discuss some strategies used by some successful learners on an individual basis not shared by other successful learners. First, P1 makes use of two interesting strategies. The first is to use newly learnt items when the teacher requires him to talk about a particular topic in the class. P1 probably has the confidence and the ability to talk in front of people, which he is used to as he gives talks in his mother tongue (6.6.4). This confidence and ability allow him to try to practise new items in front of his colleagues in the class. The second strategy is the attempt to imitate native speakers when he interacts with other students. It seems that P1 exploits his interaction with other learners to practise words and phrases he hears from native speakers. This strategy appears to be associated with good learners in the literature (e.g. Kayaoglu 1997).

Second, P3 practises recently learnt words by paying attention to them when encountered in reading or listening. Although noticing is important in learning, P3 practises words receptively. It is surprising that P3 does not try to make use of words productively because during the interview he appeared self-confident and spoke Arabic fluently. Third, P5 uses the strategy of asking native speakers questions when talking to them.

6.6.5.5 Practice strategies associated with individual less successful learners
In this sub-section, I intend to discuss some strategies used by some less successful learners which are not shared by other less successful students. First, P8 reported that he refers to his dictionary when finding difficulty in using some items while speaking. It should be mentioned that P8 is the only less successful learner who reported that he tries to practise new items when talking with native speakers.

Second, P9 reported that he discusses with his colleagues the meanings and usage of some vocabulary items. This strategy can be classified as a social/cooperative
strategy (O'Malley & Chamot 1990). The use of this strategy by P9 is probably due to the observation that TAFL classroom practice does not promote group work, and yet P9 might feel that such tasks should be a part of in-class activities; hence he practises on his own initiative with other students.

Finally, both groups of learners reported practising new lexical items in some other activities such as doing homework and writing letters. One issue needs to be mentioned concerning using words in writing letters. P1 reported that he refers to his notes when experiencing difficulty in using a particular item. Apart from this, both groups of students seem to be similar in their use of these two strategies. However, the differences between the successful and the less successful learners may lie in how the students practise their vocabulary through these activities (Cook 1996), and how consistent they are in using words, which is not revealed by the methodology of this study.

6.6.6 Metacognitive

Eight general metacognitive strategies (strategy level) have been identified in this study. The following sub-sections will examine the differences between the two groups of learners in their use of these strategies.

6.6.6.1 The strategy of revision

The results of the study show that both groups of students seem to revise lessons after class, but the difference between them is found in that the successful learners focus on new items in their revision of lessons more than their less successful peers (see 6.6.6.2 below). However, successful learners are also distinguished by the their strategy of revising previously learnt words on a regular basis (substrategy level), as shown in the following extracts:

P2: When I study new words, I revise the words that I learnt on the preceding day before studying the new ones.
P3: ... at the weekend I revise the lessons that I took during the week and sometimes I revise what I studied from the beginning of the term.
P5: at the weekend I do general revision.

In contrast, the less successful learners do not go back to such items as much and as regularly as the successful learners. This finding is consistent with findings of some

6.6.6.2 The strategy of paying attention

It appears from the data that the successful learners are marked by their strategy of paying attention to every new item met in the class and trying to discover its meaning. By contrast, only two less successful learners (P7 & P8) try to discover the meaning of every new word. The following extracts illustrate this point:

P3: Often I must understand everything introduced in the class.
P5: I try to discover the meaning of every word either in the dictionary or through the teacher.
P9: Actually I do not understand all the new items, only about 50%.....

Further, the successful learners, unlike the less successful ones, pay close attention to new items when preparing lessons and when revising them. The successful learners are probably aware of the importance of paying attention to new items, especially those introduced in class, and they vary their strategies between class and out of class, since they do not discover the meaning of every new word met out of class (6.6.7.1). However, the ignoring of new items by some of the less successful learners, particularly when preparing, might be due their misunderstanding of the teachers’ advice, as can be seen from the following extract:

P6:..... The teacher said when you read the text do not worry about new words; if you face a difficult item underline it and ask about it in class.

This result confirms Ahmed’s finding (1988) that while the good learners showed a desire to learn almost all the words they encountered, the poor students overlooked many vocabulary items they met. Ignoring vocabulary items was classified as a passive strategy by Ahmed (1988). The strategy of paying attention is recognised as necessary for vocabulary learning to take place (Ellis 1995).

6.6.6.3 The strategies of problem identification and problem solving

It seems that the successful learners are more aware of their difficulties. Therefore, they refer to the difficulties they experience in learning Arabic vocabulary. They reported 7 difficulties, whereas the less successful learners reported only 5. Table 6.6 below presents the problems reported by the two groups.
Table 6.6 Difficulties reported by the participants

<table>
<thead>
<tr>
<th>The successful learners</th>
<th>The less successful learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty in finding some items in dictionary.</td>
<td>Difficulty in comprehending dictionary.</td>
</tr>
<tr>
<td>Difficulty when some items are not included in dictionary.</td>
<td>Difficulty in pronouncing some Arabic letters.</td>
</tr>
<tr>
<td>Difficulty in pronunciation.</td>
<td>Forgetting many items learnt.</td>
</tr>
<tr>
<td>Difficulty in remembering some items when needed.</td>
<td>Difficulty in using some items with multiple meanings.</td>
</tr>
<tr>
<td>Difficulty in putting some items into practice.</td>
<td>Difficulty in using words in sentences.</td>
</tr>
<tr>
<td>Difficulty in pronouncing items which are non-Arabic in origin.</td>
<td></td>
</tr>
<tr>
<td>Difficulty in inflection.</td>
<td></td>
</tr>
</tbody>
</table>

Problem identification, which is the acknowledgement of the main issues which are hindrances to successful learning, is considered a very important metacognitive strategy (O'Malley & Chamot 1990). I would expect that more problems in learning will be associated with less successful learners. The less successful learners are probably unaware of some of the problems they have, or they might underestimate them. They probably also did not remember some of their problems during the interview (5.5.2). It may also be that the successful learners, unlike the less successful ones, have the confidence and courage to tell the investigator about their problems.

In addition, the four successful learners who reported difficulties (P2, P3, P4 & P5) also reported solutions to their difficulties. In contrast, two less successful learners (P6 & P10) did not act to overcome their difficulties, as can be seen in the following extract:

P6: ... I have a problem with the dictionary. I do not understand the dictionary's explanation.  
R: Did you do anything to solve this problem?  
P6: No.

Identifying a problem and determining a solution involve a monitoring process (Rubin 1987).
6.6.6.4 The strategy of self-assessment

Although the researcher did not ask students to evaluate their vocabulary learning (see Interview Guide, Appendix 5), the data shows that the successful learners are more willing to assess their lexical knowledge. They have very positive assessments of their vocabulary knowledge since three of them (P2, P4 & P5) reported that they have a wealth of vocabulary and P1 reported that he has the ability to understand most words met in the class. The following extracts show this:

P4: .... I learnt so many Arabic words previously.
P5: ..... it is very rarely I face many words that I do not know because I studied Arabic in my country right through high school.

On the other hand, only two less successful learners (P7 and P8) were willing to assess their lexical knowledge. However, they had fairly negative assessments of their ability to learn Arabic vocabulary. It is not clear whether other less successful learners were unable to assess their abilities or simply forgot to report them, since, as mentioned previously, the participants in this study were not asked to assess either their abilities or their lexical knowledge. One point should be kept in mind: the positive assessments reported by the successful learners about themselves did not preclude them from working hard (see 6.6.6.1 & 6.6.6.2) or from trying to expand their vocabulary knowledge (6.6.7). Self-evaluation, which is assessing one’s own learning and results in statements of self-assessment about a one’s level of proficiency as a learner, is regarded as a very important metacognitive strategy (O’Malley & Chamot 1990).

6.6.6.5 The strategy of setting goals

Although the majority of the students in this study do not seem to have clear goals and objectives in their learning, some successful learners (P1 & P2) refer to particular objectives they have set for themselves. P1 reported two general goals: obtaining adequate vocabulary knowledge to be used in teaching later on and mastering many lexical items in order to be a writer in Arabic. P2 said that he aims to learn lexical items from both written and spoken varieties of Arabic. These two successful learners appear to have formulated some plans to attain their goals. P7 also said that his purpose is to know the meanings of all vocabulary items introduced in the class and to have the ability to use them. However, the above goals seem to be long-term rather than short-term aims (Oxford 1990). Nevertheless, by applying the
strategy of preparation (see 6.6.6.6 below) and the strategy of regular revision (see 6.6.6.1 above), the successful learners set short-term aims for themselves, even if they did not state them explicitly. Other participants may have goals and plans, but the investigator was not able to elicit their goals and plans through the interview, since some learners did not understand the question, as can be seen in the following extracts:

R: Do you have particular goals in learning words...? P5: I do not understand the question.
R: Do you have any goals you want to reach? P10: Goals how?

6.6.6.6 The strategy of preparation

Regarding preparation before class, the difference between the two groups lies in their consistency in applying this strategy. Although two of the successful learners (P3 & P5) make no preparation at all, three (P1, P2 & P4) appear to be consistent in their preparations. On the other hand, despite the fact that most of the less successful learners (P6, P8, P9 & P10) make use of the strategy of preparation, they are not consistent. The following responses illustrate this point:

P8: I may prepare myself when the text is difficult or long, or when the teachers ask me to do so.
P9: Sometimes, when the teacher asks me to read the lesson at home before the class.

In addition, and as mentioned previously (6.6.6.2), it appears that the successful learners pay attention to new words in their preparation more than the less successful learners do.

6.6.6.7 The strategy of self-testing

With regard to self-testing, the data shows that this strategy is associated with the successful learners, since three of them (P2, P3 & P4) reported using this strategy and none of the less successful students do. Self-testing has been proposed as an effective learning strategy (O'Malley & Chamot 1990; Sanaoui 1995; Lawson & Hogben 1996). However, the other two successful learners may evaluate their learning through regular revision (6.6.6.1).

6.6.7 Expanding lexical knowledge

The most striking difference between the two groups of learners lies in their efforts to expand their lexical knowledge. The results of the present study, therefore, indicate that expanding lexical knowledge is the only major category that distinguished successful learners from less successful ones (6.3). All the successful
learners devote a lot of time to independent study and reported engaging in self-initiated learning activities. By contrast, the less successful learners reported engaging in a minimal amount of independent study and relied primarily on classroom instruction to provide opportunities for vocabulary learning. Thus, the successful learners engage in many activities in order to acquire new lexical items, while the less successful learners content themselves largely with new items introduced in class. A close examination of the sources of new items other than what is taught in class reveals a great difference between the two groups. The successful learners used 13 strategies to learn new items, whereas the less successful learners used only 6 as can be seen in Table 6.7 below. What is more, some successful learners stated clearly their interest in items met outside class and paid less attention to items met in class; some less successful learners, on the other hand, admitted their ignorance of items met outside class. The following responses made by some successful and less successful learners illustrate this point:

P2: What is taught in the class is often easy for me; I am more interested in items encountered outside the curriculum.
P3: I try to exploit any opportunity to learn new words.
P9: I do not go beyond the textbooks.... R: You mean you pay attention only to words in the textbooks? P9: Yes.

<table>
<thead>
<tr>
<th>The successful learners</th>
<th>The less successful learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading books.</td>
<td>Reading books.</td>
</tr>
<tr>
<td>Reading newspapers and magazines.</td>
<td>Reading newspapers.</td>
</tr>
<tr>
<td>Paying attention to new items included in street signs.</td>
<td>Listening to radio.</td>
</tr>
<tr>
<td>Listening to radio.</td>
<td>Talking to native speakers.</td>
</tr>
<tr>
<td>Watching TV.</td>
<td>Talking to colleagues.</td>
</tr>
<tr>
<td>Reading poetry.</td>
<td>Watching TV.</td>
</tr>
<tr>
<td>Reading Quran.</td>
<td></td>
</tr>
<tr>
<td>Reading Hadith.</td>
<td></td>
</tr>
<tr>
<td>Paying attention to teacher’s talk.</td>
<td></td>
</tr>
<tr>
<td>Attending lectures outside university.</td>
<td></td>
</tr>
<tr>
<td>Talking to native speakers.</td>
<td></td>
</tr>
<tr>
<td>Listening to religious tapes.</td>
<td></td>
</tr>
<tr>
<td>Asking about the names of things.</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.7 Sources of expanding lexical knowledge

This finding is consistent with those in the literature (Naiman et al. 1978; Sanaoui 1995; Gu & Johnson 1996; Kojic-Sabo & Lightbown 1999) that self-initiation and independence strategies play a major role in differentiating between good and poor
learners. This is recognized as an important learning strategy as classroom instruction is not enough if students want to reach a high level in the target language.

Moreover, the results demonstrate that the strategies of reading books, listening to the radio and reading newspapers respectively seem to be the strategies most frequently used by both groups. Students' dependence on these three sources can be attributed to the diglossic situation in Arabic (2.3.1), as these sources are probably the major providers of Standard Arabic which students can easily gain access to. Furthermore, it appears that the opportunities to use strategies involving exposure to TV are limited. This may be due to the fact that access to TV in the University Accommodation, where the learners live, is restricted.

6.6.7.1 The strategy of reading Arabic materials

Comparison between the successful and the less successful learners reveals that one major difference between the two groups is found in the amount of reading they engage in. All the successful learners reported undertaking a huge amount of reading, as shown in the following extracts from their diaries:

P2: Today I looked at some linguistics books and I found many new words. So, I wrote some of them down on paper to ask my teacher about them.

P3: I read the book X and I met two new words, which I looked up in my dictionary.

P5: I went to the Library in the Students' Club and I read some books and I got some benefit from... It is my habit to read in the Library when it is not busy with students.

By contrast, some of the less successful learners appear not to read a great deal, and some seem not to read at all, as is exemplified by the responses made by two of them:

R: Do you read books? P7: No, because we have many textbooks and they contain a lot of information.

P9:... reading books needs a lot of time.

In the TAFL context, where diglossia is involved, reading does become a vital source of input about Standard Arabic. The successful learners, unlike the less successful ones, seem to take full advantage of this source. The importance of reading to vocabulary learning is well-known, and there is a growing amount of evidence to show that an increase in reading results in a very significant increase in vocabulary growth (Nation 1990; Nation & Waring 1997).
There may also be a relationship between increased reading and the ability to guess meaning from context, which the successful learners are able to make use of (6.6.1.1). The successful learners, who reported doing a great deal of reading, encounter many unfamiliar words at a great rate, and hence have more opportunities to learn by inferring meaning from context. This reading provides considerable input, from which the successful learners clearly pick up a huge amount of vocabulary items, which leads in turn to gains in vocabulary knowledge and other aspects of linguistic proficiency (Nagy 1997).

Two issues need to be mentioned regarding the strategy of reading. First, some participants (P1, P5, P8 & P10) reported that they focus on religious books. This finding was expected, since these learners are Muslims and their major purpose in learning Arabic is to increase their Islamic knowledge (2.2.2.1). Furthermore, religious books, especially those small in size, are easily available because they are distributed freely to the public in Saudi Arabia.

Second, three successful learners (P3, P4 & P5) and one less successful learner (P6) reported that when reading they do not focus on individual items, rather they try to understand the general meaning. This reflects their awareness of the function of reading and that to attempt to know the meaning of every item encountered during reading is not practicable and makes reading much more difficult.

6.6.7.2 The strategy of listening to tapes

The data of the study shows that two successful learners make use of this strategy though there is a slight difference in the kind of tapes they use. While P4 records some radio programmes on tape to listen to them again, P5 listens to ready-made religious tapes. Some students may learn much better from listening than from reading and find tapes a very powerful way of learning. Tapes also have the advantage that one can listen to them while doing something else. For this reason students might find listening to tapes a fairly painless way of studying. In addition, students can listen to them several times, which can help in absorbing many vocabulary items. Further, these ready-made religious tapes for learners are easily available because they are distributed freely to the public in Saudi Arabia. Religious knowledge, which is important for many learners, may also be gained by listening to
these tapes. It is surprising that only one participant (P5) makes use of this important source (ready-made religious tapes).

6.6.7.3 Items selected to be learnt

One interesting finding is that the less successful learners appear to be more able than the successful learners to state their criteria in choosing vocabulary items to be learnt. Three less successful learners (P6, P7 & P8) reported two criteria: items used widely by native speakers and short words. On the other hand, only one successful learner (P3) who mentioned the criteria he uses to select vocabulary items, that is, important words and words repeated several times. A possible reason for this may be that the successful learners learn many lexical items and so they apply various criteria, and hence they were unable to remember them during the interview. Apart from this conjecture, this finding is difficult to account for. However, when looking closely at the less successful learners’ criteria, one can see that they are very simple criteria, and the second one (short words) seems naive.

Finally, it seems that the majority of the participants focus largely on the Standard vocabulary. This finding can possibly be attributed to the objectives of teaching Arabic as a foreign language at ITANA, in which only the Standard variety of Arabic is taught, and learners are not encouraged to learn any Colloquial words. This is also probably due to the students’ purposes in learning Arabic which are mainly religious (see Tables 6.3 & 6.4 above), and Standard Arabic is the language of the religion’s sources (e.g. Quran, Hadith, religious books), as is illustrated in the following example:

P3: The Standard is the correct language; it is the language of books and it helps us to understand our religion....

Another possible reason for ignoring the Colloquial variety is that students may find learning two varieties of Arabic a difficult task, and hence they concentrate on one of them, which in their case is the Standard variety. Further, students probably do not feel the need to learn the Colloquial variety because they live at the University Accommodation, which is situated outside the city of Riyadh, and where the opportunities for students to mix with ordinary people are rather limited.
6.7 Chapter Summary

This chapter has analyzed and reported the findings of the multiple cases which are the first part of the present study of vocabulary learning strategies used by AFL learners in Saudi Arabia. Ten AFL learners (five successful and five less successful) have kept diaries and have been interviewed about their vocabulary learning strategies. The two groups of students have been contrasted and compared to find out the differences in their use of vocabulary learning strategies. The underlying assumption behind this approach is that successful learners differ to some extent from less successful ones in their use of a certain set of strategies in their vocabulary learning. As a result, the aim of this chapter has been to carry out this comparison in order to explore the relationship between vocabulary strategy use and success. The findings of the multiple cases have been organized in seven parts according to the seven aspects of vocabulary learning strategies adopted in this study.

- As regards using non-dictionary strategies for discovering the meanings of new words, the successful learners are distinguished from the less successful ones by their depending on guessing as the main source. They are also more able to provide examples of the cues they use in guessing. The less successful learners, on the other hand, are more dependent on the teacher as a discovery source than the successful ones. With respect to asking colleagues, the successful students are marked by their use of two strategies. Some of them consult only excellent colleagues and others ignore their colleagues totally. Moreover, one of the features of the successful learners is their strategy of referring to more than one source to find out about a given word, either for confirmation or to get additional information.

- Regarding the use of dictionaries, it appears that the successful learners keep and refer to more dictionaries than their less successful counterparts. Furthermore, the successful students focus on more information when looking up than the less successful ones. The latter almost always seem to be interested in the meaning of the word, ignoring other information provided by the dictionary.

- In taking notes, the successful learners are distinguished from their less successful peers by their strategy of recording items learnt outside the curriculum. In addition, the successful learners seem to write down much more information than that recorded by the less successful students, and they also evaluate the essential information needed for each item. Although the successful learners’ organization seems to consist of simple lists, they keep more organized notes than the less successful students. Finally, the successful learners appear to be more aware of the aim of the note-taking process and the purpose of their behaviour.

- In memorizing new items, the successful learners generally use more strategies, including association techniques, than their less successful peers. In
making associations, the successful learners seem to relate new words to relevant familiar items more than the less successful learners do. The comparison between the two groups also reveals that the less successful students are marked by their use of a pattern of strategy combination consisting of repetition and using words in sentences.

- As for practice, the successful learners appear to use practice strategies more frequently, and to use a greater variety, than their less successful counterparts. The successful learners are marked by their use of the strategy of practicing naturally by interacting with native speakers including teachers. On the other hand, the less successful students, unlike the successful ones, appear to depend on interaction with colleagues and using words in sentences as major practice strategies.

- Metacognitively, the successful learners are characterised by their regular reviewing of the items that have been learnt and by their strategy of paying attention to every new item met in the class and when preparing lessons and revising them. In addition, the successful students seem to be more able to identify their problems and to determine solutions than their less successful peers. The successful learners are also marked by their willingness to assess their lexical knowledge, their consistency in applying the strategy of preparation, and their employment of the strategy of self-testing.

- As regards expanding lexical knowledge, the successful learners appear to engage in various activities in order to acquire new vocabulary items, while the less successful content themselves largely with new words introduced in the class. Furthermore, the successful learners, unlike the less successful ones, reported undertaking a huge amount of reading.

- One of the major outcomes of this study is that three levels of strategies have been used (main strategy level, strategy level, and substrategy level). Comparison between the two groups of learners by main strategy reveals that expanding lexical knowledge is the only main strategy that distinguishes the successful learners from the less successful ones. At the strategy and substrategy levels, there are major differences between the two groups across all seven main strategies (categories).

- An interesting and important finding of this study is that students seem to use vocabulary learning strategies in particular orders and combinations.
Chapter Seven

THE SURVEY: ANALYSIS, RESULTS AND INITIAL DISCUSSION

7.1 Introduction

This chapter will present and discuss in detail the results of the second part of the present study: the survey. Its purpose, therefore, is to examine variations in the use of a number of vocabulary learning strategies reported by 162 male students learning Arabic as a foreign language at ITANA in Saudi Arabia. The data was gathered through the use of the questionnaire survey administered during the main study of the present research. This chapter seeks answers to the second main research question:

RQ2: Does the use of vocabulary learning strategies vary significantly according to the following factors?

1. **Individual factors**: students’ first language, proficiency level and level of achievement.
2. **Situational factors**: course type and variety of Arabic used out of class.
3. **Social factor**: religious identity.

7.2 Data Analysis

The data was entered into SPSS (Statistical Package for the Social Sciences, Klecka, Nie & Hull 1975) computer package and three different levels of analysis were undertaken to examine the relationship between vocabulary strategy use and some individual, situational and social factors:

1. A one-way analysis of variance (ANOVA) was undertaken on the data to obtain the patterns of variation in the learners’ overall reported vocabulary strategy use.
2. Another one-way analysis of variance (ANOVA) was undertaken to obtain the patterns of variation in the learners’ reported vocabulary strategy use of the seven strategy categories (main strategy level) adopted in the VSQ (5.8.2). One-way analysis of variance is used to make mean comparisons when there is one dependent variable and one independent variable. The striking advantage of this type of analysis is that it can be applied when there are more than two groups in the independent variable, thus the means of three or more groups on a dependent variable can be tested simultaneously for significant differences (Brown 1988).
3. Chi-square tests were carried out to obtain the patterns of variation in the learners’ reported vocabulary strategy use at the individual vocabulary strategy level, which involves both strategy and substrategy levels (6.3). It should be noted that given that these two levels come from the data analysis of the multiple cases, they were not available when developing the survey, so these two levels have been dealt with together as one level in the survey. The chi-square test compares the actual frequencies with which students give different responses on the 4-point scale. According to Green and Oxford (1995), this test is closer to the raw data than comparisons based on average responses for each item.

At each level of analysis, the variation in the learners’ reported vocabulary strategy use was examined according to the following factors:

- Learners’ first language (students whose first language has a script similar to that of Arabic and those whose first language has a different script).
- Learners’ proficiency level (high proficiency and low proficiency).
- Level of achievement (high-achievers and low-achievers).
- Course type (morning-course students and evening-course students).
- The variety of Arabic used out of class (students who use Standard Arabic, students who use Colloquial Arabic and students who do not use Arabic at all).

With this variable, a post hoc Scheffe test was employed in addition to ANOVA and chi-square tests.

- Religious identity (Muslim students and non-Muslims).

The significance level in most studies of the social sciences is typically set at p < .01 (1/100) or at p < .05 (5/100), depending on whether the researcher is willing to accept only 1 percent error or tolerate up to 5 percent error (Brown 1988). To determine significance throughout the survey in this study, value p < .05 was used. This means that a result was considered statistically significant if it could have occurred by chance fewer than 5 times out of 100.

To carry out the chi-square tests, responses of 1 and 2 ('Never true of me' and 'Sometimes true of me') were combined into a 'low strategy use' category. On the other hand, responses of 3 and 4 ('Usually true of me' and 'Always true of me') were
consolidated into a "high strategy use" category. The purpose of consolidating the four responses level on the VSQ into two categories of strategy use (low and high) is to obtain cell sizes with expected values high enough to ensure a valid analysis (Green & Oxford 1995).

In the following sections, the results of the survey at the three levels of analysis - overall vocabulary strategy use, the use of the seven vocabulary strategy categories and the use of the individual vocabulary strategies- will be presented and discussed.

The results

Before I go on to present and discuss the more detailed analysis of the data, below are the frequency tables showing the percentage response to each category for each item in each part of the VSQ.

<table>
<thead>
<tr>
<th>Item</th>
<th>Never %</th>
<th>Sometimes %</th>
<th>Usually %</th>
<th>Always %</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I encounter a new word in the class, I ask my teacher about its meaning.</td>
<td>6.8</td>
<td>28.4</td>
<td>34.0</td>
<td>30.9</td>
</tr>
<tr>
<td>When I ask my teacher about a new word, I ask him for an Arabic synonym or antonym.</td>
<td>17.3</td>
<td>42.6</td>
<td>29.6</td>
<td>10.5</td>
</tr>
<tr>
<td>If I could not ask my teacher about a word, I ask an excellent colleague.</td>
<td>26.5</td>
<td>25.3</td>
<td>24.7</td>
<td>23.5</td>
</tr>
<tr>
<td>In class, I guess the meaning of the word I do not understand then I ask my teacher for confirmation.</td>
<td>20.6</td>
<td>26.9</td>
<td>25.0</td>
<td>27.5</td>
</tr>
<tr>
<td>When I face a new word, I check for L1 cognate.</td>
<td>29.0</td>
<td>16.0</td>
<td>21.6</td>
<td>33.3</td>
</tr>
<tr>
<td>When I hear a new word used by a native speaker, I ask them about its meaning.</td>
<td>12.3</td>
<td>31.5</td>
<td>22.8</td>
<td>33.3</td>
</tr>
<tr>
<td>I look up new words in the textbook glossary.</td>
<td>15.0</td>
<td>18.1</td>
<td>32.5</td>
<td>34.4</td>
</tr>
<tr>
<td>When I ask the teacher about a new word, I ask him for an example of its usage.</td>
<td>19.1</td>
<td>30.2</td>
<td>29.0</td>
<td>21.6</td>
</tr>
</tbody>
</table>

Table 7.1 The percentage response to each category for each item in Part One in the VSQ
When I get interested in another new word in the definition of the word I look up, I look up this word as well. 10.5 22.2 36.4 30.9

I look up new words in the electronic dictionary 85.8 5.6 4.3 4.3

When I look up a word in the dictionary, I read the whole entry 15.4 24.1 27.8 32.7

I use an Arabic-English dictionary to discover the meanings of new words 50.6 14.8 13.0 21.6

When I look up a word in the dictionary, I look for its synonym and antonym. 26.5 28.4 24.1 21.0

I use an Arabic-Arabic dictionary to discover the meanings of new words. 29.6 21.0 19.1 30.2

When I look up a word in the dictionary, I look for its inflection 19.1 26.5 34.6 19.8

Table 7.2 The percentage response to each category for each item in Part Two in the VSQ

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never %</th>
<th>Sometimes %</th>
<th>Usually %</th>
<th>Always %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I specify a vocabulary notebook for each module</td>
<td>25.9</td>
<td>16.7</td>
<td>21.0</td>
<td>36.4</td>
</tr>
<tr>
<td>In my notebook, I record the mother-tongue equivalent of each word</td>
<td>25.9</td>
<td>35.8</td>
<td>14.2</td>
<td>24.1</td>
</tr>
<tr>
<td>I look up new words in an Arabic-L1 dictionary then in an Arabic-Arabic dictionary or vice versa for confirmation.</td>
<td>43.5</td>
<td>24.8</td>
<td>16.1</td>
<td>15.5</td>
</tr>
<tr>
<td>When I look up a word in the dictionary, I look for an example of its usage.</td>
<td>24.7</td>
<td>21.0</td>
<td>30.9</td>
<td>23.5</td>
</tr>
<tr>
<td>When I get interested in another new word in the definition of the word I look up, I look up this word as well.</td>
<td>22.4</td>
<td>31.1</td>
<td>28.0</td>
<td>18.6</td>
</tr>
<tr>
<td>I organize words alphabetically in my notebook</td>
<td>63.6</td>
<td>16.7</td>
<td>9.9</td>
<td>9.9</td>
</tr>
<tr>
<td>I record the inflection of each word in my notebook</td>
<td>27.8</td>
<td>36.4</td>
<td>22.2</td>
<td>13.6</td>
</tr>
<tr>
<td>I arrange the words according to the lesson in my notebook</td>
<td>25.3</td>
<td>29.0</td>
<td>20.4</td>
<td>25.3</td>
</tr>
<tr>
<td>In my notebook, I record the plural of each noun</td>
<td>12.3</td>
<td>29.6</td>
<td>34.0</td>
<td>24.1</td>
</tr>
<tr>
<td>I write down examples showing the usage of the word in my notebook.</td>
<td>13.6</td>
<td>36.4</td>
<td>27.8</td>
<td>22.2</td>
</tr>
<tr>
<td>I record the conjugation of each verb in my notebook</td>
<td>18.6</td>
<td>31.7</td>
<td>28.6</td>
<td>21.1</td>
</tr>
<tr>
<td>In my notebook, I write down the English equivalent of each word</td>
<td>56.8</td>
<td>16.7</td>
<td>12.3</td>
<td>14.2</td>
</tr>
<tr>
<td>I specify a notebook for words learnt outside the curriculum</td>
<td>38.9</td>
<td>22.8</td>
<td>17.9</td>
<td>20.4</td>
</tr>
</tbody>
</table>

Table 7.3 The percentage response to each category for each item in Part Three in the VSQ

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never %</th>
<th>Sometimes %</th>
<th>Usually %</th>
<th>Always %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I discuss word meaning and usage with a colleague to commit them to memory.</td>
<td>13.6</td>
<td>29.6</td>
<td>29.6</td>
<td>27.2</td>
</tr>
<tr>
<td>When I try to remember a word, I remember the sentence in which the word is used.</td>
<td>8.0</td>
<td>30.9</td>
<td>39.5</td>
<td>21.6</td>
</tr>
<tr>
<td>I repeat words orally and in writing to memorize them</td>
<td>6.8</td>
<td>27.8</td>
<td>30.2</td>
<td>35.2</td>
</tr>
<tr>
<td>I memorize together words that share the same root.</td>
<td>11.2</td>
<td>36.0</td>
<td>32.9</td>
<td>19.9</td>
</tr>
<tr>
<td>To memorize new words, I write them on one side of a card</td>
<td>44.7</td>
<td>22.4</td>
<td>20.5</td>
<td>12.4</td>
</tr>
</tbody>
</table>
and their explanations on the other side.

| I use newly learnt words in speaking to help me commit them to memory. | 5.0 | 23.6 | 38.5 | 32.9 |
| When I memorize a word, I connect it to its synonym and antonym. | 17.3 | 33.3 | 36.4 | 13.0 |
| I associate a new word with a known Arabic word that looks similar to help to commit it to memory. | 17.9 | 37.0 | 28.4 | 16.7 |
| I deliberately study word-formation rules in order to remember more words. | 13.6 | 28.4 | 32.1 | 25.9 |
| I associate a new word with a known Arabic word that sounds similar to help to commit it to memory. | 23.5 | 35.2 | 25.3 | 16.0 |
| I memorize words by repeating them orally. | 8.6 | 23.5 | 33.3 | 34.6 |

Table 7.4 The percentage response to each category for each item in Part Four in the VSQ

| I try to make use of newly learnt words in imaginary situations. | 4.3 | 25.3 | 34.0 | 36.4 |
| I pay attention to newly learnt words when used by native speakers. | 19.1 | 38.3 | 29.6 | 13.0 |
| I use newly learnt words in speaking with colleagues in class whenever possible. | 5.6 | 22.2 | 36.4 | 35.8 |
| I use newly learnt words in speaking with the teacher in class whenever possible. | 6.2 | 31.5 | 34.0 | 28.4 |
| I try to make use of newly learnt words when writing in Arabic. | 4.3 | 22.4 | 35.4 | 37.9 |

Table 7.5 The percentage response to each category for each item in Part Five in the VSQ

| I review newly learnt words on a regular basis | 9.9 | 29.6 | 37.7 | 22.8 |
| I study new words in the textbook before the lesson. | 14.2 | 30.2 | 29.6 | 25.9 |
| I ask a colleague to test me on some of the words that I have learnt. | 32.7 | 31.5 | 22.2 | 13.6 |
| I study new words introduced in the class when I go home. | 9.3 | 22.2 | 35.2 | 33.3 |
| I pay attention to every unknown word introduced in the class. | 8.1 | 18.0 | 38.5 | 35.4 |
| I test myself on some of the words that I have recorded. | 11.1 | 27.8 | 38.3 | 22.8 |
| I spend a lot of time studying and memorizing new words. | 15.4 | 30.2 | 35.8 | 18.5 |

Table 7.6 The percentage response to each category for each item in Part Six in the VSQ
Table 7.7 The percentage response to each category for each item in Part Seven in the VSQ

7.3 Variation in Overall Vocabulary Strategy Use

At the first level of the analysis of variance, ANOVA produced non-significant results for level of achievement, proficiency level, first language and religious identity on overall vocabulary strategy use. Significant results were obtained, however, for course type and variety of Arabic used out of class. In the following sections, I will present and discuss the ANOVA results for overall vocabulary strategy use.

7.3.1 Individual factors

None of the individual factors examined in this study seem to have relationship with the overall use of vocabulary learning strategies included in the VSQ. The results presented in Table 7.8 below indicate no significant variation in learners' overall reported vocabulary strategy use according to first language. As described earlier (4.4.1.1), students in this study were divided into two groups according to whether their first languages have a similar or a different script from that of Arabic. The means for students who use a similar script and for those who use a different script are both 2.5.

Table 7.8 Variation in overall vocabulary strategy use by first language

<table>
<thead>
<tr>
<th></th>
<th>Similar script NO=50</th>
<th>Different script NO=112</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall vocabulary</td>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
<td>S.D</td>
<td></td>
</tr>
<tr>
<td>strategy use</td>
<td>2.54</td>
<td>.42</td>
<td>2.57</td>
<td>.42</td>
<td>.12</td>
</tr>
</tbody>
</table>

According to the ANOVA results presented in Table 7.9 below, learners' overall vocabulary strategy use also does not vary significantly according to proficiency
level. In this study, the high-proficiency group comprises students who are in the third and fourth levels, and the low-proficiency group is composed of students in the first and second levels (4.4.1.2). The mean for both groups is 2.5. This indicates that there is no difference between the two groups in their overall use of vocabulary learning strategies. This result is in contrast with others reported in the literature (e.g. Ahmed 1988; Stoffer 1995).

<table>
<thead>
<tr>
<th></th>
<th>High-proficiency NO=69</th>
<th>Low-proficiency NO=93</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall vocabulary</td>
<td>2.52 .40</td>
<td>2.59 .43</td>
<td>1.12</td>
<td>p=.291(NS)</td>
<td></td>
</tr>
<tr>
<td>strategy use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7.9 Variation in overall vocabulary strategy use by proficiency level

The ANOVA results shown in Table 7.10 below also reveal that overall vocabulary strategy use does not vary significantly according to level of achievement. The level of achievement distribution of the students who participated in the VSQ is fairly balanced (47 high-achievers and 48 low-achievers). However, some students who completed the questionnaire were not included in this division because they (e.g. students in the first level) had not taken exams at ITANA, so they did not have grades which might be used in placing them in either of the two groups. Therefore, these students were excluded from this comparison. One point that needs to be mentioned is that while two criteria were used to assign the successful and the less successful learners in the multiple cases (5.5.3), only one criterion, the students' grades in the previous term's exams, was employed to group students who completed the VSQ into high-achievers and low-achievers. Those who scored A and B (excellent and very good) were placed in the high-achiever group, and those who obtained grades C and D (good and acceptable) were placed in the low-achiever group (see section 7.5.1.3 for a discussion of the possible effects of this difference in grouping). In Table 7.10 below both groups have the mean 2.5, which means that there is no difference between them in the overall use of vocabulary learning strategies. This finding is different from other findings in the literature (e.g. Ahmed 1989; Lawson & Hogben 1996).
I, ow-achievers High-achievers F Significance Pattern of

<table>
<thead>
<tr>
<th>Overall vocabulary strategy use</th>
<th>Low-achievers NO=48</th>
<th>High-achievers NO=47</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
<td>S.D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall vocabulary strategy use</td>
<td>2.53 .45</td>
<td>2.57 .43</td>
<td>.20</td>
<td>p=.654(NS)</td>
<td></td>
</tr>
</tbody>
</table>

Table 7.10 Variation in overall vocabulary strategy use by level of achievement

7.3.2 Situational factors

The results of the survey conducted in this study reveal that both situational factors (course type and variety of Arabic used out of class) investigated in the present study have relationships with the overall use of vocabulary learning strategies. The ANOVA results as demonstrated in Table 7.11 below show greater reported vocabulary strategy use for morning-course students than evening-course students (p=.006; with means of 2.6 and 2.4 respectively). It is to be expected that the morning students, as full-time learners, would employ more strategies than the part-time students in the evening classes (see sub-sections 7.4.2 and 7.5.2.1). This result confirms to some extent Oxford and Nyikos’ (1989) finding that course status has a relationship with the use of learning strategies.

<table>
<thead>
<tr>
<th>Morning course NO=123</th>
<th>Evening course NO=39</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall vocabulary strategy use</td>
<td>2.61 .40</td>
<td>2.40 .43</td>
<td>7.60</td>
<td>p=.006 (S)</td>
</tr>
</tbody>
</table>

Table 7.11 Variation in overall vocabulary strategy use by course type

The results presented in Table 7.12 below show significant variation in overall vocabulary strategy use according to the variety of Arabic used out of class. The means for Standard, Colloquial and no Arabic groups are 2.6, 2.4 and 2.1 respectively. These figures indicate that students who use Standard Arabic report greater overall vocabulary strategy use than the other two groups. Further, students who use Colloquial Arabic report greater overall vocabulary strategy use than students who do not use Arabic at all. However, this result must be taken with some caution because of hugely unequal group sizes.
7.3.3 Social factor

The social factor investigated in this study does not seem to have a relationship with the overall use of vocabulary learning strategies. The results of the ANOVA in Table 7.13 below show non-significant variation according to religious identity.

<table>
<thead>
<tr>
<th></th>
<th>Muslim NO=157</th>
<th>Non-Muslim NO=5</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>Mean S.D</td>
<td>Mean S.D</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall vocabulary strategy use</td>
<td>2.57 .42</td>
<td>2.22 .30</td>
<td>3.40</td>
<td>p=.067(NS)</td>
<td>Standard&gt; colloquial&gt; no Arabic</td>
</tr>
</tbody>
</table>

Table 7.13 Variation in overall vocabulary strategy use by religious identity

In short, the individual factors (first language, proficiency level and level of achievement) and the social factor (religious identity) examined in this study seem not to have relationship with the overall use of vocabulary learning strategies by AFL learners. By contrast, the two situational factors (course type and variety of Arabic used out of class) investigated in the present study do appear to have relationship with overall use of vocabulary learning strategies.

7.4 Variation in Use of the Seven Vocabulary Strategy Categories

The second level of variance shows non-significant variations between two of three individual factors (first language and level of achievement) and the use of the seven vocabulary strategy categories (main strategy level) included in the VSQ. Only one category (note-taking) varies significantly with proficiency level. As mentioned previously (5.8.2), the seven categories of vocabulary strategy adopted in the VSQ, in which each category was addressed in one part of the questionnaire, are:

Part 2: Dictionary Use.
Part 3: Note-Taking.
Part 4: Memorization.
Part 5: Practice.
Part 6: Metacognitive.
Part 7: Expanding Lexical Knowledge.

Regarding the situational (course type and variety of Arabic used out of class) and social (religious identity) factors, the second level of variance indicates that some categories of the seven show significant variation with these factors. With course type, four categories (2, 4, 5 and 7) show a significant variation. Variety of Arabic used out of class has a significant relationship with four categories (4, 5, 6 and 7). Finally, with religious identity, only two categories (1 and 7) vary significantly. Consequently, none of the six factors investigated in this study shows significant variation with all the seven vocabulary categories (main strategy level). The ANOVA results regarding variation in learners’ reported use of the seven vocabulary strategy categories utilized in the VSQ according to each of the independent variables are presented and discussed in the following sections.

7.4.1 Individual factors

The ANOVA results as presented in Table 7.14 show that learners’ reported use of all the seven vocabulary strategy categories does not vary significantly according to their first languages. Taking this result with the result of the first level of variance, it seems that students’ first language does not have a relationship with vocabulary strategy use at both levels: overall use and seven categories.

<table>
<thead>
<tr>
<th>Strategy category</th>
<th>Similar script NO=50</th>
<th>Different script NO=112</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1 Discovering</td>
<td>2.60 .54</td>
<td>2.63 .50</td>
<td>.119</td>
<td>p=.731(NS)</td>
<td></td>
</tr>
<tr>
<td>Part 2 Dictionary</td>
<td>2.35 .52</td>
<td>2.35 .46</td>
<td>.000</td>
<td>p=.994 (NS)</td>
<td></td>
</tr>
<tr>
<td>Part 3 Note-taking</td>
<td>2.31 .57</td>
<td>2.32 .51</td>
<td>.017</td>
<td>p=.895 (NS)</td>
<td></td>
</tr>
<tr>
<td>Part 4 Memorization</td>
<td>2.60 .62</td>
<td>2.63 .56</td>
<td>.055</td>
<td>p=.816 (NS)</td>
<td></td>
</tr>
<tr>
<td>Part 5 Practice</td>
<td>2.82 .58</td>
<td>2.83 .61</td>
<td>.004</td>
<td>p=.949 (NS)</td>
<td></td>
</tr>
<tr>
<td>Part 6 Metacognitive</td>
<td>2.63 .61</td>
<td>2.71 .61</td>
<td>.605</td>
<td>p=.438 (NS)</td>
<td></td>
</tr>
<tr>
<td>Part 7 Expanding</td>
<td>2.76 .67</td>
<td>2.81 .74</td>
<td>.168</td>
<td>p=.683 (NS)</td>
<td></td>
</tr>
</tbody>
</table>

Table 7.14 Variation in use of vocabulary strategy categories by first language
Table 7.15 below shows non-significant variation in the use of six of the seven vocabulary strategy categories according to proficiency level. Only one category, that is, note-taking shows significant variation according to proficiency level: low-proficiency students report greater use of note-taking strategies than high-proficiency students, but this is not high enough to make a difference in the overall result (7.3.1), since there was no significant variation in learners' overall vocabulary strategy use according to proficiency level.

<table>
<thead>
<tr>
<th>Strategy category</th>
<th>High-proficiency NO=69</th>
<th>Low-proficiency NO=93</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Part 1 Discovering</td>
<td>2.60</td>
<td>.52</td>
<td>2.64</td>
<td>.50</td>
<td>.182</td>
</tr>
<tr>
<td>Part 2 Dictionary</td>
<td>2.37</td>
<td>.46</td>
<td>2.34</td>
<td>.50</td>
<td>.103</td>
</tr>
<tr>
<td>Part 3 Note-taking</td>
<td>2.21</td>
<td>.48</td>
<td>2.40</td>
<td>.55</td>
<td>5.00</td>
</tr>
<tr>
<td>Part 4 Memorization</td>
<td>2.52</td>
<td>.55</td>
<td>2.69</td>
<td>.59</td>
<td>3.50</td>
</tr>
<tr>
<td>Part 5 Practice</td>
<td>2.86</td>
<td>.59</td>
<td>2.80</td>
<td>.61</td>
<td>.315</td>
</tr>
<tr>
<td>Part 6 Metacognitive</td>
<td>2.61</td>
<td>.60</td>
<td>2.73</td>
<td>.62</td>
<td>1.48</td>
</tr>
<tr>
<td>Part 7 Expanding</td>
<td>2.82</td>
<td>.64</td>
<td>2.78</td>
<td>.77</td>
<td>.169</td>
</tr>
</tbody>
</table>

Table 7.15 Variation in use of vocabulary strategy categories by proficiency level

Finally, the ANOVA results in Table 7.16 below indicate no significant variation in the use of the seven vocabulary strategy categories according to the third individual factor examined in this study, that is, level of achievement. The same result was also obtained in the first level of variance (7.3.1) in which the level of achievement and overall vocabulary strategy use are weakly related.

<table>
<thead>
<tr>
<th>Strategy category</th>
<th>Low-achievers NO=48</th>
<th>High-achievers NO=47</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Mean</td>
<td>S.D.</td>
<td></td>
</tr>
<tr>
<td>Part 1 Discovering</td>
<td>2.62</td>
<td>.52</td>
<td>2.56</td>
<td>.53</td>
<td>.322</td>
</tr>
<tr>
<td>Part 2 Dictionary</td>
<td>2.40</td>
<td>.47</td>
<td>2.38</td>
<td>.44</td>
<td>.031</td>
</tr>
<tr>
<td>Part 3 Note-taking</td>
<td>2.26</td>
<td>.48</td>
<td>2.33</td>
<td>.44</td>
<td>.595</td>
</tr>
<tr>
<td>Part 4 Memorization</td>
<td>2.56</td>
<td>.61</td>
<td>2.55</td>
<td>.61</td>
<td>.011</td>
</tr>
<tr>
<td>Part 5 Practice</td>
<td>2.83</td>
<td>.70</td>
<td>2.91</td>
<td>.60</td>
<td>.350</td>
</tr>
</tbody>
</table>
7.4.2 Situational factors

In section 7.3.2, the ANOVA results show significant variation between students’ overall reported vocabulary strategy use according to the two situational factors investigated in this study: course type and variety of Arabic used out of class. In this level of analysis, the ANOVA results also indicate that there is significant variation in the use of some vocabulary strategy categories according to these two factors.

Table 7.17 below demonstrates that learners’ reported use of four vocabulary strategy categories; namely, dictionary use (Part 2), memorization (Part 4), practice (Part 5) and expanding lexical knowledge (Part 7) differs significantly according to course type. In these four categories, students on the morning course reported greater vocabulary strategy use than those on the evening course. In section 7.3.2, the same patterns of variation in overall vocabulary strategy use according to course type are evident: students on the morning course report greater vocabulary strategy use than those on the evening course.

<table>
<thead>
<tr>
<th>Strategy category</th>
<th>Morning course NO=123</th>
<th>Evening course NO=39</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D</td>
<td>Mean</td>
<td>S.D</td>
<td></td>
</tr>
<tr>
<td>Part 1 Discovering</td>
<td>2.66</td>
<td>.49</td>
<td>2.50</td>
<td>.56</td>
<td>2.94</td>
</tr>
<tr>
<td>Part 2 Dictionary</td>
<td>2.41</td>
<td>.43</td>
<td>2.19</td>
<td>.59</td>
<td>6.32</td>
</tr>
<tr>
<td>Part 3 Note-taking</td>
<td>2.34</td>
<td>.48</td>
<td>2.26</td>
<td>.65</td>
<td>.641</td>
</tr>
<tr>
<td>Part 4 Memorization</td>
<td>2.68</td>
<td>.56</td>
<td>2.45</td>
<td>.59</td>
<td>4.73</td>
</tr>
<tr>
<td>Part 5 Practice</td>
<td>2.88</td>
<td>.59</td>
<td>2.65</td>
<td>.61</td>
<td>4.55</td>
</tr>
<tr>
<td>Part 6 Metacognitive</td>
<td>2.72</td>
<td>.61</td>
<td>2.55</td>
<td>.61</td>
<td>2.28</td>
</tr>
<tr>
<td>Part 7 Expanding</td>
<td>2.92</td>
<td>.67</td>
<td>2.40</td>
<td>.71</td>
<td>17.0</td>
</tr>
</tbody>
</table>

Table 7.17 Variation in use of vocabulary strategy categories by course type
One possible explanation of the greater employment of dictionary use, memorization and practice strategies by students on the morning course is the demands of their intensive course, which are greater than those of the non-intensive course held in the evening. On the other hand, the greater use of expanding lexical knowledge strategies by the morning-course students is rather unexpected, because these students meet many new vocabulary items in the class, so their need to learn extra items outside the curriculum is probably less than the evening-course students. This is because students on the evening course have only six hours of classroom teaching each week, which might be not enough to allow a large number of new Arabic words to be introduced. However, the status of the morning-course students as full-time learners, and the fact that they have come to Saudi Arabia only to learn Arabic, may provide them with greater motivation to learn more lexical items, whereas the students on the evening course study Arabic only in their free time and as they have a great deal of work to do apart from their course commitments, they may have less motivation and make less effort to learn new items.

The results of ANOVA in Table 7.18 below indicate that learners’ reported use of four vocabulary strategy categories: memorization (Part 4), practice (Part 5), metacognitive (Part 6), and expanding lexical knowledge (Part 7) correlates significantly with variety of Arabic used out of class. Regarding these four categories, students who reported using Standard Arabic report greater vocabulary strategy use than those using the Colloquial. Further, students who use Colloquial Arabic report greater vocabulary strategy use than students who do not use Arabic at all. In the first level of variance (section 7.3.2), the same patterns of variation were also obtained: students who use Standard Arabic report greater overall vocabulary strategy use than the other two groups.

<table>
<thead>
<tr>
<th>Strategy category</th>
<th>Standard NO=128 Mean &amp; S.D</th>
<th>Colloquial NO=26 Mean &amp; S.D</th>
<th>No Arabic NO=8 Mean &amp; S.D</th>
<th>F</th>
<th>Significance Level</th>
<th>Pattern of variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1 Discovering</td>
<td>2.64 &amp; .50</td>
<td>2.66 &amp; .58</td>
<td>2.26 &amp; .32</td>
<td>2.15</td>
<td>p=.120(NS)</td>
<td></td>
</tr>
<tr>
<td>Part 2 Dictionary</td>
<td>2.40 &amp; .44</td>
<td>2.20 &amp; .62</td>
<td>2.13 &amp; .51</td>
<td>2.80</td>
<td>p=.063(NS)</td>
<td></td>
</tr>
<tr>
<td>Part 3 Note-taking</td>
<td>2.33 &amp; .49</td>
<td>2.32 &amp; .72</td>
<td>2.15 &amp; .48</td>
<td>.427</td>
<td>p=.653(NS)</td>
<td></td>
</tr>
<tr>
<td>Part 4 Memorization</td>
<td>2.68 &amp; .55</td>
<td>2.53 &amp; .62</td>
<td>1.93 &amp; .49</td>
<td>7.25</td>
<td>p=.001(S)</td>
<td>S&gt;C&gt;N</td>
</tr>
</tbody>
</table>
7.4.3 Social factor

As mentioned before (section 7.3.3), even though there is no significant variation in learners' overall reported vocabulary strategy use according to religious identity, the ANOVA results in Table 7.19 indicate significant variation in the use of two of the vocabulary strategy categories according to students' religious identity differences. Regarding non-dictionary strategies for discovering the meanings of new words (Part 1) and expanding lexical knowledge (Part 7), Muslim students report greater vocabulary strategy use than non-Muslims. However, the variation in the use of these two categories is not high enough to make variation in the overall use of vocabulary learning strategies.

Table 7.18 Variation in use of vocabulary strategy categories by variety of Arabic used out of class

Table 7.19 Variation in use of vocabulary strategy categories by religious identity

In sum, the second analysis of variance shows the following patterns (see Table 7.20). First, learners' reported use of non-dictionary strategies for discovering the meanings of new words vary according to only one variable, that is, religious identity. Second, learners' reported use of dictionary use strategies vary according to only one variable, that is, course type. Third, learners' reported use of note-taking
strategies vary according to only one variable, that is, proficiency level. Fourth, learners’ reported use of memorization strategies vary according to only two variables, that is, course type and variety of Arabic. Fifth, learners’ reported use of practice strategies vary according to only two variables, that is, course type and variety of Arabic. Sixth, learners’ reported use of metacognitive strategies vary according to only one variable, that is, variety of Arabic. Finally, learners’ reported use of expanding lexical knowledge strategies vary according to three variables, that is, course type, variety of Arabic and religious identity.

<table>
<thead>
<tr>
<th>Strategy category</th>
<th>First language</th>
<th>Proficiency level</th>
<th>Achievement level</th>
<th>Course type</th>
<th>Variety of Arabic</th>
<th>Religious identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1: non-dictionary strategies for discovering the meaning</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Part 2: dictionary use</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Part 3: note-taking</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Part 4: memorization</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Part 5: practice</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Part 6: metacognitive</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Part 7: expanding lexical knowledge</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 7.20 Summary of learners’ use of the seven vocabulary strategy categories varying significantly according to the six independent variables

7.5 Variation in Use of Individual Vocabulary Strategy Items

Having discussed the use of vocabulary learning strategies across the entire survey and in the use of the different vocabulary strategy categories by AFL learners, I intend in the following sections to describe and discuss the variation in AFL students’ use of each of the individual vocabulary strategies (belonging to strategy and substrategy levels) included in the VSQ according to the individual, situational and social factors examined in this study using the chi-square tests.
7.5.1 Individual factors

7.5.1.1 Variation in use of individual vocabulary strategies by students’ first language

As mentioned before in sections 7.3.1 and 7.4.1, learners’ overall vocabulary strategy use and learners’ strategy use of the seven main vocabulary strategy categories does not vary significantly according to their first languages. The chi-square tests also show that only a very small proportion of the vocabulary strategy items vary significantly according to this factor. Only 4 out of 63 individual vocabulary strategy items vary significantly by first language, as is shown in Table 7.21 below.

<table>
<thead>
<tr>
<th>Individual Vocabulary Strategy Item</th>
<th>% of High Use (3 or 4)</th>
<th>Observed X</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies used significantly more often by students with similar script</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/Part 2 I use an Arabic-Arabic dictionary to discover the meanings of new words.</td>
<td>64</td>
<td>42</td>
<td>6.18</td>
</tr>
<tr>
<td>5/Part 3 In my notebook, I write down the synonym and antonym of each word.</td>
<td>59</td>
<td>41</td>
<td>4.49</td>
</tr>
<tr>
<td>2/Part 7 I learn new words when I listen to cassettes.</td>
<td>84</td>
<td>67</td>
<td>4.55</td>
</tr>
<tr>
<td>Strategies used significantly more often by students with different script</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/Part 2 I look up new words in an Arabic-L1 dictionary.</td>
<td>34</td>
<td>55</td>
<td>6.31</td>
</tr>
</tbody>
</table>

Table 7.21 Individual vocabulary strategies showing significant variation by first language

In this table (and other similar tables in the following sections), information on the percentages of students reporting high vocabulary strategy use (responses of 3 or 4) is presented to give an idea of the comparative popularity of the strategies listed. Moreover, the chi-square values (observed x) are included with each item to show the strength of the variation of each strategy item. The significance level is also displayed in these tables. The results show that 3 items (of the strategies showing significant variation by first language) are used by students whose languages have a script similar to Arabic. On the other hand, only one item is used significantly more often by students whose first language has a different script. Looking closely at these strategies reveals that the first group of students are more dependent on L2-based strategies than on L1-based strategies. Thus, the similarity between the script of their
first language and that of Arabic probably helps these students to rely on the target language when using the dictionary and taking notes.

7.5.1.2 Variation in use of individual vocabulary strategies by proficiency level

As found in section 7.3.1, students' proficiency level seems not to have a relationship with the overall use of vocabulary learning strategies. Moreover, the second analysis of variance (section 7.4.1) shows that only one vocabulary strategy category varies significantly according to proficiency level; that is, note-taking. The chi-square tests as presented in Table 7.22 below indicate that only 7 out of 63 VSQ items vary significantly by this individual factor.

<table>
<thead>
<tr>
<th>Individual Vocabulary Strategy Item</th>
<th>% of High Use (3 or 4)</th>
<th>Observed X</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategies used significantly more often by high-proficiency students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/Part 2 When I look up a word in the dictionary, I look for an example of its usage.</td>
<td>65</td>
<td>49</td>
<td>3.99</td>
</tr>
<tr>
<td>10/Part 2 I use an Arabic-Arabic dictionary to discover the meanings of new words.</td>
<td>59</td>
<td>41</td>
<td>4.84</td>
</tr>
<tr>
<td><strong>Strategies used significantly more often by low-proficiency students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/Part 1 When I ask the teacher about a new word, I ask him for an example of its usage.</td>
<td>40</td>
<td>58</td>
<td>4.84</td>
</tr>
<tr>
<td>2/Part 3 In my notebook, I record mother-tongue equivalent of each word.</td>
<td>21</td>
<td>50</td>
<td>13.90</td>
</tr>
<tr>
<td>6/Part 3 I organize words alphabetically in my notebook.</td>
<td>8.7</td>
<td>28</td>
<td>9.27</td>
</tr>
<tr>
<td>12/Part 3 In my notebook, I write down English equivalent of each word.</td>
<td>15</td>
<td>34</td>
<td>6.92</td>
</tr>
<tr>
<td>3/Part 4 I repeat words orally and in writing to memorize them.</td>
<td>50</td>
<td>76</td>
<td>11.49</td>
</tr>
</tbody>
</table>

Table 7.22 Individual vocabulary strategies showing significant variation by proficiency level

Two out of the seven items (showing significant variation by proficiency level) are used more often by high-proficiency students than by low-proficiency ones, and five out of seven are employed more often by low-proficiency learners than by high-proficiency ones. Looking closely at these seven individual items reveals the following differences. First, it seems that high-proficiency students rely more on monolingual dictionaries than their low-proficiency counterparts. This result confirms the result of the multiple cases (Chapter 6, section 6.6.2), since the
participants in the multiple cases (who are high-proficiency students) reported extensive use of monolingual dictionaries. Second, it appears that low-proficiency students are more dependent on their mother tongue when taking notes. Third, the results also demonstrate that low-proficiency learners arrange their vocabulary notes alphabetically more than their high-proficiency peers do. In the multiple cases (Chapter 6, section 6.6.3), none of the participants reported using this strategy, which might mean that AFL learners use this note-taking strategy at the early stages of their learning of Arabic and discontinue it as their proficiency increases.

7.5.1.3 Variation in use of individual vocabulary strategies by level of achievement

As stated previously in sections 7.3.1 and 7.4.1, students' overall vocabulary strategy use and students' strategy use of the seven main vocabulary categories do not vary significantly according to students' level of achievement. The chi-square tests illustrated in Table 7.23 below show that only 3 items out of 63 included in the VSQ vary significantly according to this factor.

<table>
<thead>
<tr>
<th>Individual Vocabulary Strategy Item</th>
<th>% of High Use (3 or 4)</th>
<th>Observed X</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategies used significantly more often by high-achievers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/Part 4 I associate a new word to a known Arabic word that looks similar to help to commit to memory.</td>
<td>56</td>
<td>31</td>
<td>5.70</td>
</tr>
<tr>
<td>3/Part 6 I ask a colleague to test me about some of the words that I have learnt.</td>
<td>41</td>
<td>21</td>
<td>4.56</td>
</tr>
<tr>
<td>Strategies used significantly more often by low-achievers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/Part 3 In my notebook, I record the plural of each noun.</td>
<td>50</td>
<td>70</td>
<td>4.04</td>
</tr>
</tbody>
</table>

Table 7.23 Individual vocabulary strategies showing significant variation by level of achievement

Table 7.23 above demonstrates that 2 items, (I associate a new word to a known Arabic word that looks similar to help to commit to memory and I ask a colleague to test me about some of the words that I have learnt), are utilized significantly more often by high-achievers than by low-achievers. It was found that these two strategies, which have been termed association strategy (6.6.4.1) and self-testing strategy (6.6.6.7), are used by the successful learners but not by the less
successful ones participating in the multiple cases (see Chapter Six). It is surprising that only 3 strategies show significant variation by level of achievement since major differences were found between the successful and the less successful learners in their vocabulary strategy use (see sections 6.6.1, 6.6.2, 6.6.3, 6.6.4, 6.6.5, 6.6.6, and 6.6.7 in Chapter Six). This finding can possibly be explained by two reasons. First, a questionnaire is probably not the most suitable instrument to investigate strategy use, particularly the differences between the successful or high-achievers and the less successful or low-achievers as become clear from the multiple cases results (see Chapter Six). This is because the questionnaires are less sensitive to fine individual differences in strategy use (5.8), the order of and links between strategies is lost in questionnaires, and it is believed (4.3.1) that the difference between the two groups usually lies in how and when a particular strategy is used rather than in how often it is used. In addition, the difference in using a given strategy can be found in its relationship with other strategies used by the same learner and whether is a first choice or a last resort. For example, it was found that the strategy of guessing is used by most students participating in the multiple cases, both successful and less successful. But the difference lies in how much each student relies on this strategy; it is the first choice of the successful learners more often than of the less successful ones (6.6.1.1). Such a difference may be difficult to capture using the questionnaire. Second, in the survey only one criterion, which is students’ grades in the previous term’s exams, has been employed to group students into high-achievers and low-achievers, whereas in the multiple cases two criteria, which are students’ grades in the previous term’s exams and the teachers' judgements, have been used to group them into successful and less successful groups (5.5.3). Exams results may not reflect the students’ actual proficiency level since exams in the TAFL context generally measure students’ ability to memorize language elements more than their ability to produce the language fluently and correctly in speaking and writing. Consequently, using teachers’ judgements as an additional criterion in the multiple cases might result in differences in grouping students between the multiple cases and the survey.

7.5.2 Situational factors

7.5.2.1 Variation in use of individual vocabulary strategies by course type
The analysis of ANOVA in sections 7.3.2 and 7.4.2 reveals that course type has some relationship with the total use of vocabulary learning strategies and on the use
of four vocabulary strategy categories (dictionary use, memorization, practice and expanding lexical knowledge). The chi-square tests, as shown in Table 7.24 below, demonstrate that 26 out of 63 individual vocabulary strategy items included in the VSQ vary significantly according to course type.

<table>
<thead>
<tr>
<th>Individual Vocabulary Strategy Item</th>
<th>% of High Use (3 or 4)</th>
<th>Observed X</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategies used significantly more often by morning-course students</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/Part 1 When I ask the teacher about a new word, I ask him for an example of its usage.</td>
<td>55</td>
<td>35</td>
<td>4.45</td>
</tr>
<tr>
<td>3/Part 2 I look up new words in Arabic-L1 dictionary then in an Arabic-Arabic dictionary or vice versa for confirmation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/Part 2 When I look up a word in the dictionary, I look for example of its usage.</td>
<td>61</td>
<td>38</td>
<td>6.54</td>
</tr>
<tr>
<td>5/Part 2 When I get interested in another new word in the definition of the word I look up, I look up this word as well.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9/Part 2 When I look up a word in the dictionary, I look for its synonym and antonym.</td>
<td>51</td>
<td>25</td>
<td>7.82</td>
</tr>
<tr>
<td>10/Part 2 I use an Arabic-Arabic dictionary to discover the meanings of new words.</td>
<td>60</td>
<td>15</td>
<td>23.75</td>
</tr>
<tr>
<td>11/Part 2 When I look up a word in the dictionary, I look for its inflection.</td>
<td>63</td>
<td>25</td>
<td>17.02</td>
</tr>
<tr>
<td>9/Part 3 In my notebook, I record the plural of each noun.</td>
<td>63</td>
<td>41</td>
<td>6.09</td>
</tr>
<tr>
<td>10/Part 3 I write down examples showing the usage of the word in my notebook.</td>
<td>55</td>
<td>33</td>
<td>5.70</td>
</tr>
<tr>
<td>11/Part 3 I record the conjugation of each verb in my notebook.</td>
<td>54</td>
<td>33</td>
<td>5.50</td>
</tr>
<tr>
<td>7/Part 4 When I memorize a word, I connect it to its synonyms and antonyms.</td>
<td>56</td>
<td>25</td>
<td>11.58</td>
</tr>
<tr>
<td>9/Part 4 I deliberately study word-information rules in order to remember more words.</td>
<td>63</td>
<td>41</td>
<td>6.09</td>
</tr>
<tr>
<td>4/Part 5 I use newly learnt words in speaking with colleagues in class whenever possible.</td>
<td>68</td>
<td>43</td>
<td>7.69</td>
</tr>
<tr>
<td>5/Part 5 I practise newly learnt words by using them in sentences.</td>
<td>79</td>
<td>53</td>
<td>9.94</td>
</tr>
<tr>
<td>7/Part 5 I try to make use of newly learnt words when writing in Arabic.</td>
<td>73</td>
<td>43</td>
<td>11.55</td>
</tr>
<tr>
<td>2/Part 6 I study new words in the textbook before the lesson.</td>
<td>61</td>
<td>35</td>
<td>8.03</td>
</tr>
<tr>
<td>7/Part 6 I spend a lot of time studying and memorizing new words.</td>
<td>59</td>
<td>38</td>
<td>5.20</td>
</tr>
<tr>
<td>1/Part 7 I learn new vocabulary items when reading Arabic books.</td>
<td>82</td>
<td>43</td>
<td>23.50</td>
</tr>
<tr>
<td>3/Part 7 I pick up new words when I read newspapers.</td>
<td>65</td>
<td>28</td>
<td>16.32</td>
</tr>
<tr>
<td>4/Part 7 I learn new words when I listen to cassettes.</td>
<td>61</td>
<td>33</td>
<td>9.11</td>
</tr>
</tbody>
</table>

| Strategies used significantly more often by evening-course students |
|---------------------------------------------------------------|------------------------|------------|------------|


Table 7.24 Individual vocabulary strategies showing significant variation by course type

<table>
<thead>
<tr>
<th>Part 2</th>
<th>2/Part 2</th>
<th>When I look up a word in the dictionary, I look only for its meaning.</th>
<th>28</th>
<th>66</th>
<th>18.41</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/Part 2</td>
<td>I look up new words in the electronic dictionary.</td>
<td>5.7</td>
<td>17</td>
<td>5.63</td>
<td>.018</td>
<td></td>
</tr>
<tr>
<td>8/Part 2</td>
<td>I use an Arabic-English dictionary to discover the meanings of new words.</td>
<td>22</td>
<td>71</td>
<td>31.47</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>2/Part 3</td>
<td>In my notebook, I record mother-tongue equivalent of each word.</td>
<td>33</td>
<td>53</td>
<td>5.27</td>
<td>.022</td>
<td></td>
</tr>
<tr>
<td>4/Part 3</td>
<td>In class, I write down the meanings of new words only on the textbook.</td>
<td>48</td>
<td>71</td>
<td>6.32</td>
<td>.012</td>
<td></td>
</tr>
<tr>
<td>12/Part 3</td>
<td>In my notebook, I write down English equivalent of each word.</td>
<td>14</td>
<td>64</td>
<td>37.16</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 7.24 shows that 20 of the items, which show significant variation by course type, are used significantly more often by morning-course students than by evening-course students. These strategies represent all the seven vocabulary strategy categories. On the other hand, only 6 items out of 26 are employed significantly more often by evening-course students. These strategies represent only two (dictionary use and note-taking) of the seven vocabulary strategy categories adopted in the VSQ. A closer look at the individual vocabulary strategy items in Table 7.24 above reveals the following differences between the two groups. First, while morning-course students employed in-class and out-of-class vocabulary strategies, the evening-course students seem to use only in-class strategies, since they refer to their dictionaries and take notes, both of which usually occur in the classroom. This might mean that evening-course students do not make efforts to learn Arabic vocabulary outside the class. One explanation might be that most of these learners work in the private sector in Saudi Arabia, consequently they spend a great deal of time every day in working, so they may not have much free time in which to study at home.

Second, morning-course students seem to prepare themselves, memorize and practise new items, and spend time studying new words more than the evening-course students. This result can be explained by the fact that morning-course students have a large amount of free time after class in which to study; also they are requested by their teachers to do preparation, revision and homework. Third, evening-course students seem to be dependent on English in their learning of Arabic vocabulary more than the morning-course students. This finding is not surprising because most
students on the evening-course are proficient in English and some Arabic teachers at ITANA use English in instructing them.

7.5.2.2 Variation in use of individual vocabulary strategies by variety of Arabic used out of class

The ANOVA results in sections 7.3.2 and 7.4.2 have indicated that the variety of Arabic used out of class has a relationship with the overall use of vocabulary learning strategies and the use of four categories (memorization, practice, metacognitive and expanding lexical knowledge). In Table 7.25 below, the chi-square tests administered at the individual vocabulary strategy level reveal that 26 out of the 63 individual VSQ items vary significantly according to this factor. In sum, there are five different patterns of variation. The most common type (17 out of the 26 significant items) includes the one in which students who use the Standard variety of Arabic report greater vocabulary strategy use than the other two groups, with the students who do not use Arabic at all reporting the least vocabulary strategy use (Standard > Colloquial > No Arabic). Items in this type of pattern represent all the seven vocabulary categories. Looking closely at Table 7.25 reveals that this pattern is marked by the following characteristics. First, students of the first group make use of three metacognitive strategies (preparation, revision and spending much time in vocabulary study) more often than the other two groups. Second, students in the first group employ four strategies to expand their lexical knowledge more often than the other two groups. Three strategies (reading books, reading newspapers and listening to the radio) out of the four were found to be the sources most used by the participants (successful and less successful) in the multiple cases in expanding their vocabulary knowledge (6.6.7). This confirms the idea that these three sources are probably the major providers of Standard Arabic input available to AFL learners.

It also seems that the students who use Colloquial Arabic and those who do not use Arabic at all are more dependent on their mother tongue and on English language than students in the first group. This is revealed in the fourth and fifth patterns of variation.
<table>
<thead>
<tr>
<th>Individual Vocabulary Strategy Item</th>
<th>% of High Use (3 or 4)</th>
<th>Observed X</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Standard</td>
<td>Colloquial</td>
<td>No Arabic</td>
</tr>
<tr>
<td><strong>Pattern 1: Standard&gt;Colloquial&gt;No Arabic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/Part 1 When I ask my teacher about a new word, I ask him an Arabic synonym or antonym.</td>
<td>46</td>
<td>23</td>
<td>0</td>
</tr>
<tr>
<td>7/Part 1 I look up new words in the textbook glossary.</td>
<td>71</td>
<td>57</td>
<td>25</td>
</tr>
<tr>
<td>3/Part 2 I look up new words in an Arabic-L1 dictionary then in an Arabic-Arabic dictionary or vice versa for confirmation.</td>
<td>42</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>5/Part 2 When I get interested in another new word in the definition of the word I look up, I look up this word as well.</td>
<td>70</td>
<td>65</td>
<td>25</td>
</tr>
<tr>
<td>11/Part 2 When I look up a word in the dictionary, I look for its inflection.</td>
<td>60</td>
<td>34</td>
<td>25</td>
</tr>
<tr>
<td>10/Part 3 I write down examples showing the usage of the word in my notebook.</td>
<td>55</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>6/Part 4 I use newly learnt words in speaking to help me commit them to memory.</td>
<td>78</td>
<td>57</td>
<td>12</td>
</tr>
<tr>
<td>4/Part 5 I use newly learnt words in speaking with colleagues in class whenever possible.</td>
<td>69</td>
<td>42</td>
<td>12</td>
</tr>
<tr>
<td>5/Part 5 I practise newly learnt words by using them in sentences.</td>
<td>78</td>
<td>61</td>
<td>25</td>
</tr>
<tr>
<td>7/Part 5 I try to make use of newly learnt words when writing in Arabic.</td>
<td>72</td>
<td>42</td>
<td>37</td>
</tr>
<tr>
<td>2/Part 6 I study new words in the textbook before the lesson.</td>
<td>58</td>
<td>53</td>
<td>12</td>
</tr>
<tr>
<td>4/Part 6 I study new words introduced in the class when go home.</td>
<td>73</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>7/Part 6 I spend a lot of time studying and memorizing new words.</td>
<td>60</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>1/Part 7 I learn new vocabulary items when reading Arabic books.</td>
<td>85</td>
<td>34</td>
<td>12</td>
</tr>
<tr>
<td>2/Part 7 I learn new words when reading the Holy Quran</td>
<td>78</td>
<td>53</td>
<td>37</td>
</tr>
<tr>
<td>3/Part 7 I pick up new words when I read newspapers.</td>
<td>64</td>
<td>26</td>
<td>12</td>
</tr>
<tr>
<td>5/Part 7 I pick up new vocabulary items when listening to radio.</td>
<td>62</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td><strong>Pattern 2: Standard&gt;No Arabic&gt;Colloquial</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/Part 2 I use an Arabic-Arabic dictionary to discover the meanings of new words.</td>
<td>57</td>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>4/Part 7 I learn new words when I listen to cassettes.</td>
<td>62</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td><strong>Pattern 3: Colloquial&gt;Standard&gt;No Arabic</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4/Part 3 In class, I write down the meanings of new words only on the textbook.</td>
<td>49</td>
<td>84</td>
<td>37</td>
</tr>
</tbody>
</table>
I discuss word meaning and usage with a colleague to commit to memory.
1/Part 4

I practise newly learnt words when speaking with someone.
1/Part 5

Pattern 4: Colloquial>No Arabic>Standard

In my notebook, I record mother-tongue equivalent of each word.
2/Part 3

In my notebook, I write down English equivalent of each word.
12/Part 3

Pattern 5: No Arabic>Colloquial>Standard

I look up new words in the electronic dictionary.
6/Part 2

I use an Arabic-English dictionary to discover the meanings of new words.
8/Part 2

Table 7.25 Individual vocabulary strategies showing significant variation by variety of Arabic used out of class

7.5.3 Social factor

7.5.3.1 Variation in use of individual vocabulary strategies by religious identity

The chi-square tests presented in Table 7.26 below show that 15 out of 63 individual vocabulary items vary significantly according to religious identity. The results show that strategies are employed significantly more often by Muslim students than by their non-Muslim counterparts.

<table>
<thead>
<tr>
<th>Individual Vocabulary Strategy Item</th>
<th>% of High Use (3 or 4)</th>
<th>Observed</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Muslims</td>
<td>Non-Muslims</td>
<td>X</td>
</tr>
<tr>
<td>Strategies used significantly more often by Muslim students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8/Part 1 When I ask the teacher about a new word, I ask him for an example of its usage.</td>
<td>52</td>
<td>0</td>
<td>5.28 .021</td>
</tr>
<tr>
<td>9/Part 2 When I look up a word in the dictionary, I look for its synonym and antonym.</td>
<td>46</td>
<td>0</td>
<td>4.23 .040</td>
</tr>
<tr>
<td>5/Part 3 In my notebook, I write down the synonym and antonym of each word.</td>
<td>48</td>
<td>0</td>
<td>4.50 .034</td>
</tr>
<tr>
<td>10/Part 3 I write down examples showing the usage of the word in my notebook.</td>
<td>51</td>
<td>0</td>
<td>5.15 .023</td>
</tr>
<tr>
<td>7/Part 4 When I memorize a word, I connect it to its synonyms and antonyms.</td>
<td>51</td>
<td>0</td>
<td>5.03 .025</td>
</tr>
<tr>
<td>11/Part 4 I memorize words by repeating them orally.</td>
<td>69</td>
<td>20</td>
<td>5.43 .020</td>
</tr>
<tr>
<td>4/Part 5 I use newly learnt words in speaking with colleagues in class whenever possible.</td>
<td>64</td>
<td>0</td>
<td>8.54 .003</td>
</tr>
<tr>
<td>6/Part 5 I use newly learnt words in speaking with the teacher in class whenever possible.</td>
<td>55</td>
<td>0</td>
<td>5.98 .014</td>
</tr>
<tr>
<td>1/Part 7 I learn new vocabulary items when reading Arabic books.</td>
<td>75</td>
<td>20</td>
<td>7.56 .006</td>
</tr>
</tbody>
</table>
In total, 11 out of 15 items showing significant variation by religious identity are used significantly more often by Muslim students than by non-Muslim students. These strategies represent six vocabulary strategy categories (non-dictionary strategies for discovering meanings of new words, dictionary use, note-taking, memorization, practice, and expanding lexical knowledge). The strategies with the highest percentage are those for expanding lexical knowledge (3 out of 15) followed by note-taking strategies, memorization strategies and practice strategies (2 out of 15 for all three categories). As can be seen in Table 7.26 above, examples of the use of strategies for expanding lexical knowledge in which learners differ significantly according to religious identity include learning new words when reading the Holy Quran and when listening to cassettes. This result was to be expected since these two sources are among the most important Islamic sources for Muslims. It is also worth noting that Muslim students report greater use of two practice strategies pertaining to using words in class, whether with teachers or colleagues, than non-Muslims. By contrast, Table 7.26 also demonstrates that only 4 out of the 15 strategies whose use differs significantly according to religious identity are used significantly more often by non-Muslim learners than by Muslims. Furthermore, these strategies represent only two (dictionary use and note-taking) of the seven vocabulary strategy categories.
7.6 How Students Deal with Diglossia

In this section the results of the diglossia interview are reported. Thus the section seeks to provide answers to the third main research question:

RQ3 Do students adopt specific strategies to cope with the problem of diglossia?

As mentioned previously (5.9), eight students out of 26 (of 162 who completed the VSQ) who reported using Colloquial Arabic were interviewed to find out their strategies for dealing with the diglossic situation of Arabic when learning vocabulary. What each of these students said about this issue is reported in the following paragraphs.

S1 reported that he has learnt Colloquial Arabic from Arabs that he interacts with, since when he hears a new word he memorizes and uses it. At present, he speaks Standard Arabic more than Colloquial and thinks Standard is better because it helps him to understand the Holy Quran. Moreover, S1 reported that his colleagues at work try to talk to him in Standard Arabic to help him and that sometimes they correct him. When having difficulty speaking Standard, he borrows some colloquial words.

S2 reported that he has learnt Colloquial Arabic by interacting with people, since he works in a restaurant and colloquial words just come to his mind when needed. Now, he is trying to speak Standard Arabic, but experiences some difficulties in understanding and speaking it. He also reported that he attempts to practise Arabic with his Saudi colleague and asks him about both colloquial and standard words. If, when speaking Standard, he cannot remember a particular word he uses its colloquial equivalent. Generally, S2 tries to use words that are easily understood by people, even if they are very colloquial.

S3 reported that he has learnt Colloquial Arabic from people in general and from his relatives, who speak the Saudi dialect. He mentioned that he can understand Colloquial but cannot respond quickly and accurately. When he cannot remember a given colloquial word he replaces it by its standard equivalent. S3 reported that he sometimes confuses colloquial and standard items, nevertheless he tries to differentiate between the two in his mind.
S4 reported that he has learnt Colloquial Arabic by interacting with people and that he uses it when teaching young students, since he teaches the Quran. When he hears a new colloquial word he asks about its meaning and tries to use it. However, S4 makes notes on standard words but not colloquial ones. He mentioned that he sometimes mix the two types of vocabulary items, using colloquial words when speaking Standard and vice versa.

S5 reported that he has learnt Colloquial Arabic by interacting with Arabs. He sometimes records colloquial words with their standard or English equivalents and then tries to memorize them. On some occasions he memorizes them without recording. S5 reported that he uses Colloquial Arabic with Saudis because this helps him to mix with people. He sometimes asks people about the English equivalents of some colloquial items. Moreover, he sometimes uses standard vocabulary items when speaking Colloquial. However, S5 attempts to compare standard and colloquial words in order to differentiate between the two.

S6 reported that he has learnt Colloquial Arabic from mixing with people, since he has been working in a company. Although he tries to use Standard Arabic he finds it more difficult to speak than Colloquial. In addition, he sometimes uses colloquial items when speaking Standard and vice versa. He also mentioned that he sometimes writes down the colloquial equivalents for standard words.

S7 reported that he has learnt Colloquial Arabic in his country, where many people speak a variety of Colloquial Arabic similar to the Saudi dialect. He has also learnt Colloquial Arabic by interacting with Arabs. He mentioned that he uses Standard Arabic with other students and Colloquial with Saudis and that the latter is easier for him. Moreover, S7 reported that he introduces many colloquial items when speaking Standard, and he does not find much difficulty in switching from Colloquial to Standard and vice versa. When hearing a new word, he refers to the dictionary in order to compare the standard and the colloquial meanings. He also writes down the colloquial equivalents of some standard words.

S8 reported that he has learnt Colloquial Arabic by interacting with people, since he works in a hospital as a doctor, though he finds difficulties in speaking both varieties.
He tries to focus on the Standard but if people do not understand him, he asks his interpreter to find the most suitable words. He reported that most people understand standard medical terms which he uses mostly.

In short, it seems that interaction with native speakers is the main source of Colloquial Arabic for all students. It also appears that most students use standard items when speaking the Colloquial variety and vice versa. Generally speaking, the results of these eight interviews indicate that students employ the following five main strategies to deal with diglossia:

- Separating the standard and colloquial words in the mind.
- Writing down the standard words but practising the colloquial ones.
- Writing down the standard equivalents of some colloquial words.
- Writing down the colloquial equivalents of some standard items.
- Comparing the colloquial and standard words.

Although this result provides us with some idea about how AFL learners deal with diglossia, I am not sure how generalized this result would be and further research needs to be carried out to confirm or disconfirm it.

7.7 Chapter Summary

This chapter has analyzed and reported the findings of the survey. The aim of the survey was to examine the variations in the use of 63 vocabulary learning strategies by 162 AFL learners at ITANA according to certain individual (students' first language, proficiency level and level of achievement), situational (course type and variety of Arabic used out of class) and social factors (religious identity). Three different levels of analysis were undertaken to examine the variations in vocabulary strategy use: an ANOVA was undertaken to obtain the variation in the overall vocabulary strategy use, another ANOVA was carried out to obtain the variation in the use of the seven strategy categories adopted in the VSQ, and chi-square tests were undertaken to obtain the variation in the use of individual vocabulary strategy items.

- Individual factors: none of the individual factors seem to have a relationship with the overall use of vocabulary learning strategies. The second level of
variance shows non-significant variations between two of the three individual factors (first language and level of achievement) and the seven vocabulary strategy categories included in the VSQ. Only one category (note-taking) varies significantly with proficiency level: low-proficiency students reported greater use of note-taking strategies than high-proficiency students. The chi-square tests show that only a very small proportion of the vocabulary strategy items vary significantly according to individual factors. Only 4 out of the 63 individual items vary significantly by first language, only 7 vary significantly by proficiency level, and only 3 vary significantly according to level of achievement. Consequently, the individual factors examined in this study appear to have a very weak relationship with the use of vocabulary learning strategies.

- **Situational factors**: both situational factors have relationships with the overall use of vocabulary learning strategies: morning-course students reported greater strategy use than evening-course students, and students who use Standard Arabic reported greater overall vocabulary strategy use than the other two groups, while students who use Colloquial Arabic reported greater overall strategy use than students who do not use Arabic at all. The second level of variance indicates that four categories (dictionary use, memorization, practice and expanding lexical knowledge) vary significantly with course type: morning-course students reported greater strategy use in the four categories than evening-course students. The results also show that four categories (memorization, practice, metacognitive, and expanding lexical knowledge) vary with the variety of Arabic used out of class: students who reported using Standard Arabic reported greater vocabulary strategy use in these four categories than those using the Colloquial, and the students who use Colloquial Arabic reported greater vocabulary strategy use than those who do not use Arabic at all. The chi-square tests demonstrate that a fairly considerable number of individual vocabulary strategy items vary significantly according to the two situational factors. 26 out of 63 individual vocabulary strategy items included in the VSQ vary significantly by course type: 20 items out of 26 are used significantly more often by morning-course students than by evening-course students. In addition, 26 individual items out of 63 vary significantly according to variety of Arabic used out of class: 17 out of the 26 significant items are used significantly more often by students who use the Standard variety of Arabic than by students in the other two groups. As a result, the two situational factors (course type and variety of Arabic used out of class) investigated in this study seem to have somewhat strong relationship with vocabulary strategy use. However, this result concerning the situational factors may be because of the hugely unequal group sizes, especially with the factor of the variety of Arabic used outside class.

- **Social factor**: religious identity does not seem to have a relationship with the overall use of vocabulary learning strategies. The second level of variance shows that only two categories (non-dictionary strategies for discovering the meanings of new words and expanding lexical knowledge) vary significantly with religious identity: Muslim students reported greater strategy use in these two categories than non-Muslims. The chi-square tests indicate that only 15 items out of 63 vary significantly according to religious identity: 11 out of 15 items showing significant variation are used significantly more often by Muslim students than
by non-Muslim students. As a consequence, the social factor examined in this study appears to have a relatively moderate relationship with the use of vocabulary learning strategies. However, this result may also be a result of the huge difference in the number of students in each group.

- To deal with diglossia, AFL learners seem to employ the following strategies: separating the standard and colloquial words in the mind, writing down the standard words but practising the colloquial ones, writing down the standard equivalents of some colloquial words, writing down the colloquial equivalents of some standard items, and comparing the colloquial and standard words.
Chapter Eight

FINAL DISCUSSION & IMPLICATIONS

8.1 Introduction

In this chapter the major findings of this study of vocabulary learning strategies used by AFL learners in Saudi Arabia will be discussed. The implications of the present study for our understanding of learning strategies and vocabulary learning, vocabulary teaching in the TAFL context, strategy research methodology and further research will also be considered. However, this chapter will begin by discussing the significance and usefulness of combining the multiple cases and the survey approaches.

8.2. The Combination of Multiple Cases and Survey

Two different approaches (multiple cases and survey) have been employed to identify vocabulary learning strategies used by AFL learners in Saudi Arabia. The multiple cases approach has been chosen as the most appropriate tool to investigate the relationship between strategy use and success. Given the fact that this study is the first empirical research on vocabulary learning strategies conducted in the TAFL context in Saudi Arabia, I found it is necessary to employ the survey approach, along with the multiple cases, in order to collect data about vocabulary learning strategies from all students at ITANA to get a general picture of strategy use.

The employment of two different approaches to collect data in this study was useful for two reasons. First, this combination shows that the type of information obtained may be influenced by the instrument used. In the survey part of this study, useful information about vocabulary learning strategies, in terms of quantity, variation and the whole picture of strategy use, has been obtained, but important information about strategy combination, strategy order, and the links between strategies was missing. On the other hand, detailed and in-depth information on these latter aspects has been obtained through the multiple cases.

Second, this combination demonstrates that the research instrument used probably influences the participants' responses. So if one employs two different instruments with the same population, one may arrive at very different (probably contrasting)
results, due to the nature of each instrument. For example, the length of the survey in this study might have led students to fill it in quickly and hence to be perhaps less accurate in describing their strategies than the participants in the multiple cases. On the other hand, students participating in the multiple cases had more time and chances to discuss with the researcher their behaviour either during the interviews or in writing their diaries.

8.3 Discussion of Findings

This section discusses the results and findings of the present study; the discussion is organized in two sub-sections in response to the two main purposes of the study (1.4). Thus, it firstly discusses the relationship between vocabulary strategy use and success and then examines the relationship between certain individual, situational and social factors and the use of vocabulary learning strategies.

8.3.1 The relationship between vocabulary strategy use and success

The relationship between vocabulary strategy use and success has been explored in the present study by identifying and comparing the vocabulary learning strategies employed by five successful and five less successful AFL learners. The following is a description of the most significant features across the group of the successful learners.

The successful learners use a greater variety of strategies

The results of this study indicate that the successful learners as a group reported employing a larger quantity and wider variety of vocabulary learning strategies than the less successful group. For example, the former group reported using 16 memorization strategies to commit new vocabulary items to memory, whereas the latter group reported using only 10. In addition, the data show that the successful learners appear to use a greater variety of practice strategies and to use them more frequently than their less successful peers. This result may be due to the great number of lexical items learnt by the successful students, as they study many new items outside the class (6.6.7) and they also pay attention to every new word taught in the class (6.6.6.2). Dealing with a large amount of vocabulary items may entail the application of several strategies. Another explanation might be that this large
quantity of new items makes it likely that these items have different features which probably require the employment of various learning strategies.

The finding that the good students use more learning strategies than the poor students is consistent with findings in the literature (O'Malley & Chamot 1990). Schouten-van Parreren (1995) claims that the variety and content of the actions taken in learning words are crucial for their retention. She found that the greater the variety of ways words were treated, the better they were learnt. A similar view of the effectiveness of employing different methods to learn a word is also put forward by McCarthy (1990: 120), who maintains that “effective memorizing and assimilation of words is probably not the result of any single method, and the good learner will operate a variety of techniques, some of which will be highly individual and idiosyncratic”. So these successful learners may be aware that learning and memorizing a huge amount of lexical items requires utilizing numerous learning strategies. As a result, the application of various strategies to deal with new words by these successful students probably helps them to learn and retain new items more effectively than their less successful counterparts.

Conversely, that the successful learners’ repertoire encompasses a large quantity of vocabulary learning strategies probably facilitates the acquisition of a great number of vocabulary items. It is possible that these strategies were at their disposal as passive procedural knowledge and that they were stimulated by encountering a great number of new words.

The successful learners are deeper processors and seem to have more complete word knowledge
The results of this study show that the successful learners appear to process information about new items more deeply than their less successful counterparts. This can be seen from the following strategies employed by the successful learners. First, there is the use of the strategy of referring to more than one source to find out about a particular item. Some successful students reported using the combination of guessing and then asking the teacher, or asking the teacher and then referring to the dictionary either for confirmation or to get further information. The successful students appear to evaluate the difficulty of new vocabulary items and determine
which items need further consultation, and they seem to be aware that every source has its limitations and that to gain a clearer and more complete idea of the meaning and usage of a given word, one has to consult various sources. Consulting more than one source requires more mental effort, which has been suggested as a strongly contributing factor to the depth of mental engagement (Craik 1979) and hence to better retention (Brown & Perry 1991). Examining a given word in different sources probably reduces the possibility of its being forgotten.

Second, I will consider the strategy of keeping and referring to more than one dictionary, and the strategy of focusing on a great deal of dictionary information. Their referring to more than one dictionary indicates that these successful learners may be aware of the limitations of every dictionary, and of the fact that dictionaries differ in their explanations of word meaning and in the information they provide, and hence they consult different dictionaries as compensation and complement. These two strategies allow the successful learners to get more information about a particular word. The amount of information processed when learning a new word has been proposed as a contributing factor to the depth of mental engagement (Johnson-Laird, Gibbs, & deMowbray 1978). Further, examining a substantial amount of information about vocabulary items requires a good deal of effort, and so deeper processing occurs, and probably better retention (Craik & Lockhart 1972).

Third, regarding the use of the strategy of recording detailed information about new lexical items in the form of notes, it has been argued that dealing with a great deal of information requires considerable effort, and hence depth of processing might be yielded (Craik & Lockhart 1972).

Moreover, the above strategies (consulting more than one source to find out about a particular item, referring to more than one dictionary, focusing on a substantial amount of dictionary information and recording a great deal of information in vocabulary notes) enrich students' knowledge about new items and hence more complete vocabulary knowledge might be developed. These strategies are also indicative of students' awareness of the multifaceted nature of word knowledge (2.3.5) and of their awareness of the importance of building a (fairly) complete knowledge about each item learnt, which is necessary for native-like control (Schmitt...
The successful learners were also more willing to talk about their lexical knowledge during the interviews and had very positive assessments of their knowledge (6.6.6.4).

The successful learners are more independent

The results of the present study indicate that the successful learners are more independent in their vocabulary learning than their less successful peers. The former engage in many activities outside class in order to learn new vocabulary items, whereas the latter rely primarily on classroom instruction to provide opportunities for vocabulary learning. What is more, the successful learners are distinguished by their practice of regularly writing down vocabulary items encountered outside the curriculum in their vocabulary notes. This finding indicates their realization of the significance of learning new items outside the classroom world and also their awareness of the limitations of classroom teaching in providing the amount of vocabulary knowledge necessary for reaching a high level of proficiency in the target language. In addition, since the Arabic used in newspapers and magazines and on the radio differs in some aspects (style, structure, vocabulary) from the Standard Arabic used in TAFL textbooks, these students may be aware of these differences and want to be exposed to this type of language. Undertaking many out-of-class activities is also an indication of their high motivation. The less successful learners, on the other hand, seem to be less motivated and focus only on what is taught in the classroom.

This result is in agreement with findings in the literature (Naiman et al. 1978; Sanaoui 1995; Gu & Johnson 1996; Kojic-Sabo & Lightbown 1999). Independence and self-initiation strategies are believed to be essential conditions for successful learning. Kojic-Sabo and Lightbown (1999: 189) argue strongly that “independence is one of the crucial strategies without which learners’ chances of achieving high levels of success are considerably diminished”. Moreover, Richards (1976: 84) claims that “a learner who is constantly adding to his vocabulary knowledge is better prepared both for productive and receptive language skills”. Horsfall (1997: 8) also suggests that students “need to take charge themselves of the process of expanding their vocabulary, so that they feel they have some control over their own learning”; consequently greater autonomy is yielded. Further, Schouten-van Parreren (1995) points out the importance of personal integration of knowledge. She suggests that
student-selected vocabulary is one of the major conditions for personal involvement: the personal integration of words can be easier when students themselves choose which words to learn. Thus, the successful learners' attempts to expand their lexical knowledge probably help them to learn many new vocabulary items, to be more independent learners and hence to improve their proficiency in Arabic.

On the other hand, the high proficiency level of the successful learners and their success in learning Arabic probably provide them with the confidence to be independent learners.

The successful learners read extensively in Arabic

Related to the question of independence is the fact that the successful learners in this study, unlike the less successful ones, reported undertaking a huge amount of reading. This result seems to be congruent with findings in the literature (Embi 1996; Gu & Johnson 1996).

The successful learners in this study may be aware of the importance of reading in enhancing proficiency in a second language. Reading is recognized as an important strategy for vocabulary learning. In a detailed review of both first and second language literature on reading and vocabulary, Krashen (1989) states that reading will result in vocabulary acquisition. Further, many researchers (Dunmore 1989; Grabe & Stoller 1997) agree that there is a close connection between reading comprehension and vocabulary knowledge: reading comprehension depends on existing vocabulary knowledge and, reciprocally, reading provides an important source of further vocabulary learning. In his hypothesis of explicit and implicit vocabulary learning, Ellis (1995: 106) proposes that "reading provides an ideal environment for the implicit acquisition of orthography and also the explicit acquisition of meanings". Moreover, there seems to be a clear tendency among workers in the field to regard the written context as the prime source of vocabulary learning (Nagy, Herman & Anderson 1985; Ellis 1994, 1995), since studying the written language provides time for a longer exposure to new words. Thus, the attempt to maximize their exposure to written language is one of the major features of the successful learners in this study, and this probably assists them to attain a high proficiency level in Arabic. Moreover, these successful learners probably have the
motivation, confidence and proficiency necessary to tackle Arabic materials written originally for native speakers, as such materials have no vowel signs (2.3.2), and that these students seem able to deduce such vowels from the context indicates a high level of skill.

The less successful learners, on the other hand, appear to be less motivated to read much outside the course because they are probably more concerned with meeting its requirements and therefore concentrate on what is taught in the class (6.6.7.1). In addition, their limited ability to guess and their extensive dependence on the teacher may make reading a difficult task.

The successful learners make more use of guessing

The data of this study reveal that the successful learners seem to depend on the strategy of guessing as the main source of discovering the meanings of new vocabulary items much more than the less successful ones. The dependence of the successful learners on guessing probably leads them to be less dependent on the teacher. It has been suggested (Clarke & Nation 1980) that the skill of guessing meanings from context allows learners to acquire vocabulary without the help of the teacher. Further, it seems there is a relationship between guessing and reading. Reading a great deal may improve the successful learners' ability to guess and hence lead them to depend on guessing as the major discovering strategy, and the ability to guess probably helps them to read without much difficulty, especially when encountering many unknown vocabulary items.

This result is consistent with the vocabulary strategy literature (Papalia & Zampogna 1977; Porte 1988; Ahmed 1989; Schouten-van Parreren 1992; Gu 1994; Gu & Johnson 1996). The importance of guessing and its effectiveness has been widely recognized. Many studies (Xiaolong 1988; Hulstijn 1992; Gu & Johnson 1996) have provided evidence that guessing leads to better retention and is associated with achievement. The effectiveness of guessing reported in many studies may be because guessing involves more effort and requires greater concentration and, according to the level of processing theory (Craik & Lockhart 1972; Craik & Tulving 1975), the more one has to process information in different ways the better it is retained. Furthermore, one of the ideas that are currently gaining ground with regard to
vocabulary acquisition in a foreign language is the view that inferring the meaning of a word from its context makes an important contribution towards the retention of the word in question, because guessing results in a strong and effective involvement on the part of the learner (Schouten-van Parreren 1995). Therefore, the successful learners' dependence on the strategy of guessing probably helps them to retain new vocabulary items more effectively than the less successful students.

On the other hand, the case may be the reverse: success leads to guessing. The high proficiency level of the successful learners may lead them to depend on themselves by trying to guess the meanings of new words from the context. The sufficient vocabulary knowledge of the successful students probably provides them with the knowledge, skill and confidence to guess successfully.

The successful learners are more systematic in their learning
The findings of the study demonstrate that the successful learners seem to be more systematic in their vocabulary learning than the less successful ones. This can be seen in the participants' organization of their vocabulary notes. The successful learners, unlike the less successful ones, appear to adopt a systematic approach when arranging their notes. This may be because the successful learners' notes contain a great deal of information about every item included, and such detailed information requires some organization, without which the benefits of vocabulary notes would be reduced. It has been suggested that the organization and neatness of notes is very important for effective learning (Oxford 1990). Further, according to memory theory (Baddeley 1990), organized information is easier to learn. Bransford (1979, cited in Nyikos 1990) notes that the ability to retain information is largely dependent on further engagement with the information, such as organization of the material. Although the successful learners' organization of their notes seems to consist in making simple lists in chronological order, Gairns and Redman (1986) suggest that such organization could be effective if it is done systematically and neatly. Thus, organizing their vocabulary notes systematically may assist the successful learners to retain the information included more efficiently than the less successful students.
The successful learners seem to believe that exposure to Arabic through reading is not enough to master new items, so they keep vocabulary notes, which they try to organize in order to make the most of them.

Furthermore, the successful learners appear to be systematic in their application of the strategy of regular revision of previously learnt items. This finding is in line with those of some studies reported in the literature regarding good students (Sanaoui 1995; Kayaoglu 1997). In contrast, Lessard-Clouston (1996) and Kojic-Sabo and Lightbown (1999) found that the strategy of review was not associated with high-scoring students. There seems, however, to be a relationship between the organization of vocabulary notes and regular revision, since the former facilitates the latter.

Given the fact that the successful students in this study learn a great amount of lexical items both in and out of class, this does not preclude their revising previously learnt words, which is in turn indicative of their realization of the value of the strategy of structured revision. Structured reviewing seems to be a crucial vocabulary learning strategy. It helps to retain the items of vocabulary in the long-term memory and to retrieve them easily and automatically when required (Oxford 1990). The principle of expanding rehearsal (Baddeley 1990) suggests that students should review new lexical items soon after the initial meeting, and then at gradually increasing intervals, if they want to commit them into memory efficiently.

The successful learners are more consistent in their strategy use of preparation

The successful learners in the present study appear to be consistent (have more regular use of the same strategy) in their vocabulary strategy use, as can be seen in their application of the strategy of preparation. This result confirms one of the most important features of good students identified in the literature; that is, consistency in strategy use. Many studies (e.g. Ahmed 1989; Lawson & Hogben 1996) have noted that good students tend to be more consistent in their strategy use than poor ones. Lawson and Hogben (1996) suggest that one element of success in learning foreign vocabulary is the consistent and skillful use of learning strategies. This strategy, therefore, might be one of those that help the successful learners in this study to be successful in learning Arabic vocabulary.
The successful learners use words in natural communication

The results of this study indicate that the successful learners appear to be marked by their attempt to make more use of new items in their interaction with native speakers, including the teacher, than the less successful ones do. This finding is consistent with those in the literature (Bialystok 1981; Huang & Naerssen 1987; Ahmed 1989; Green & Oxford 1995, Gu & Johnson 1996; Embi 1996; Kojic-Sabo & Lightbown 1999). Bialystok (1981) noted that functional language practice consistently and significantly contributed to L2 achievement.

This extensive use of words in natural communication by the successful students is due to their awareness of the importance of putting words into practice, which enhances the productive side of vocabulary knowledge (2.3.5), as they are aware that receptive knowledge is not enough to attain a high level of proficiency in the target language (6.6.5). The strategy of practising naturalistically is one of the most significant learning strategies. This strategy provides interactive, rapid, personal communication (Oxford 1990). The ability to “participate in conversations with some degree of fluency [also] leads to the self-confidence necessary to make more chances with the language” (Nattinger 1988: 70). Moreover, the use of words in natural communication seems to be necessary for learners to test their knowledge of collocations, syntactic restrictions, and register appropriateness (Hatch & Brown 1995). Through this strategy, students can also improve their pronunciation and their use of structures, vocabulary, idioms, intonation, gestures, and style (Oxford 1990). Consequently, the successful learners in this study are probably aware of the complex nature of vocabulary knowledge (2.3.5) and that natural communication with (proficient) native speakers is one way of mastering this complexity. In addition, interaction with native speakers, particularly with teachers, provides students with feedback, which is very important since it gradually helps to shape and reshape the learner’s existing schemata related to the new vocabulary items (Oxford & Crookall 1990). This also shows that the successful learners take advantage of the teacher as one of the main sources of input of Standard Arabic. Therefore, the employment of this strategy probably helps the successful learners in this study to reinforce their vocabulary learning and consequently to reach a high proficiency level in Arabic. Conversely, their high proficiency level may provide the successful learners with the necessary confidence to approach native speakers.
The successful learners monitor and evaluate their learning

The findings of this study reveal that the successful learners are marked by their use of the strategy of monitoring, since they are more able to identify their difficulties and to determine solutions than their less successful peers. This result generally agrees with findings in the literature (Naiman et al. 1978; Jones, Palincsar, Ogle & Carr 1987; Gu 1994). Nisbet and Shucksmith (1986) suggest that monitoring is the key process that distinguishes good learners from poor ones.

In addition, the results of the present study indicate that the successful learners seem to evaluate their vocabulary learning regularly through their use of the strategy of self-testing. This result is consistent with those of some studies (Papalia & Zampogna 1977; Ahmed 1989; Sanaoui 1995). The strategy literature proposes that this is an effective learning strategy (O'Malley & Chamot 1990; Lawson & Hogben 1996). Thus, the application of this strategy probably helps the successful learners in this study to evaluate their vocabulary learning consistently and hence to be effective learners.

The successful learners pay more attention to new items

The findings of this study indicate that the successful learners are marked by their employment of the strategy of paying attention to every new vocabulary item encountered in the class. In contrast, they do not pay attention to every new item met outside class, as there is a huge amount of such items. So they vary the degree of their attention between according to whether the items are met in or out of class. This result seems to be compatible with some studies in the literature (Ahmed 1989; Kayaoglu 1997). The ignoring of new lexical items by the less successful students may have a negative impact on learning. Paying attention to new words is the first step towards discovering their meanings and then integrating them into the mental lexicon. In his discussion of the types of word knowledge learnt implicitly and explicitly, Ellis (1995) suggests that word recognition and speech production systems are largely learnt through exposure, but knowledge about semantic meaning needs attention and elaborative practice to be remembered. Nyikos (1990: 277) argues that receptivity on the part of the learner is crucial for the information to be comprehensible, and it is "largely determined by the amount and intensity of attention paid to the information, which in turn depends on learner interest and
motivation". Thus, this strategy probably allows the successful learners to focus on new items, trying to discover their meanings before studying and memorizing them.

In summary, the successful learners in this study are marked by employing a great variety of vocabulary learning strategies, processing information more deeply, trying to build complete vocabulary knowledge, attempting to be autonomous learners, reading widely in Arabic and depend on guessing, trying to be systematic and consistent in their learning, using words in natural communication, monitoring and evaluating their learning and paying close attention to new lexical items. The success of these learners can be partly, therefore, attributed to their use of these vocabulary learning strategies. Consequently, it may be possible to help the less successful learners to be more successful by making them aware of the significance and usefulness of these strategies.

To what extent can we make generalizations?
Although critics typically state that the case study approach offers a poor basis for generalizing, Yin (1994) argues that the multiple case study design that involves selecting carefully each case, as the present study, is able to provide more compelling evidence. Consequently, the results of the present multiple cases could be (with some caution) generalized to other successful and less successful AFL learners at least at ITANA.

General results
In this section, some important general results, which are shared by both groups of students, will be discussed.

One of the major findings of this study is the students' dependence on repetition to memorize new vocabulary items. This result confirms the widespread finding that second language learners use repetition extensively (Ahmed 1989; O'Malley & Chamot 1990; Levine & Reves 1990; Lawson & Hogben 1996; Gu & Johnson 1996; Schmitt 1997a; Al-Qarni 1997; Erten 1998).

This system of learning is now regarded as old-fashioned by some researchers, and is criticized because it does not encourage students to think actively about what they
are learning; it "is one of the most inefficient applications of human cognitive facilities" (Crow 1986: 244). Erten (1998) found that repetition produced a poor retention rate. However, it must be admitted, as Schmitt (1997a) has pointed out, that there are considerable numbers of students who have used this strategy to reach high levels of proficiency. Some researchers (Gu & Johnson 1996; Lawson & Hogben 1996) found that repetition was associated with success in recall.

Moreover, according to several studies reviewed by Nation (1990), learners need from five to sixteen or more repetitions to learn a word. As a result, Nation (1990) argues that learning words from a list is an effective means of learning a large number of words in a short time if given sufficient repetition. The difference between the successful and the less successful learners in this respect may lie in how much repetition both groups practise. It seems that the successful students are marked by their regular reviewing of newly learnt words (6.6.6.1), which might help them to retain words more effectively in their long-term memory than the less successful ones.

The results of the present study also indicate that monolingual dictionaries seem to be used much more extensively than bilingual ones by the participants in the multiple cases. This result is inconsistent with other findings in the ELT literature (Tomaszczyk 1979; Baxter 1980; Schmitt 1997a). Previous studies in ELT commonly show that learners own more bilingual dictionaries than monolingual ones and use them more frequently. However, the preponderant use of monolingual dictionaries by the participants in the present study may possibly be attributed to their high proficiency level. It is suggested (Carter 1987b; Taylor 1990) that bilingual dictionaries are more generally employed in the initial stages of learning a language, and greater use is made of monolingual dictionaries as proficiency develops. This observation is confirmed by Tomaszczyk (1979) who found that the group of less advanced students used the bilingual dictionary much more than the monolingual one, whereas the group of advanced students made greater use of monolingual dictionaries. So it appears that the use of bilingual dictionaries by second language learners generally diminishes and the use of monolingual ones increases with increasing knowledge of the target language.
Further, all monolingual dictionaries used by the participants in this study are designed for native Arabic speakers. As pointed out previously (6.6.2), this may be due to the shortage of Arabic dictionaries designed for non-native speakers. In the TESOL context, Bejoint (1981) also found that dictionaries intended for native speakers seem to be used by students as EFL dictionaries.

The results of the multiple cases demonstrate that most of the participants are not interested in keeping vocabulary notebooks. This result is contrasted with that of Lessard-Clouston (1996) and of Al-Qarni (1997), who found that the majority of their subjects wrote the words they were learning in vocabulary notebooks.

Finally, it must be noted that the participants in this study do not seem to use any word-grouping strategies when making notes on new items. This result is, to some extent, consistent with that of O'Malley et al. (1983, cited in Thompson 1987), who reported that grouping strategies were among the less frequently used strategies cited by their high-school ESL subjects. On the other hand, taking into consideration the high proficiency level of the participants in this study, this result is contrasted with that of Chamot (1984, cited in Thompson 1987), who found that grouping strategies were more favoured by students with greater ESL proficiency than by beginners, and also with that of Al-Qarni (1997), who found that his advanced subjects try to list new items according to their topic or function.

8.3.2 The effect of individual, situational and social factors on vocabulary strategy use

The relationship between certain individual, situational and social factors and the use of vocabulary learning strategies has been examined through the survey. 162 foreign learners of Arabic at ITANA in Saudi Arabia completed the VSQ, which included 63 individual vocabulary learning strategy items. Three different levels of analysis were undertaken to examine variations in vocabulary strategy use: an ANOVA was undertaken to obtain variation in the overall vocabulary strategy use, another ANOVA was carried out to obtain variation in the use of the seven strategy categories adopted in the VSQ, and chi-square tests were done to obtain variation in the use of individual vocabulary strategy items.
In the light of the findings of the survey, it is concluded that the situational factors examined in this study have the strongest relationship with vocabulary strategy use and that the individual factors have the weakest relationship. In the following subsections, the results of the survey will be discussed in more detail.

**Individual factors**

**Students’ first language**

The results of the survey indicate no significant variation either in the learners’ overall vocabulary strategy use or their reported use of the seven vocabulary strategy categories included in the VSQ according to their first language. In addition, only 4 out of 63 individual items vary significantly by first language.

Given that no previous research has investigated this factor (similarity and difference in script between L1 and L2) in relationship to vocabulary strategy use, it is not possible to compare this result with other studies. However, although script similarity seems to trigger the use of the target language by AFL learners when using dictionaries and taking notes, this finding does not confirm Koda’s (1997) finding regarding reading strategies, nor does it support Meara’s (1993) view that lexical similarities between L1 and L2 will affect learners’ strategy choice. The orthography of a student’s first language may have more impact on the skill of reading than on the use of vocabulary learning strategies, since in reading students deal directly with the orthography of the target language.

**Proficiency level**

The results of the survey demonstrate that learners’ overall vocabulary strategy use does not vary significantly according to students’ proficiency level, and only one category (note-taking) varies significantly with this factor, in which low-proficiency students report greater use of note-taking strategies than high-proficiency students. As for the individual strategy items, only 7 of the 63 VSQ items vary significantly by proficiency level.

This result provides a clear contrast to findings in the literature. While some studies (e.g. Chamot & Kupper 1989; Al-Qarni 1997) found that students at higher levels of proficiency use a wider range of strategies than those at low levels, and by contrast
some other studies (Payne 1988; Stoffer 1995) show that beginners reported using vocabulary learning strategies more frequently than students with higher levels of language proficiency, this study does not find any differences between the two groups of students (high-proficiency and low-proficiency) in overall vocabulary strategy use, a result which I cannot explain.

With respect to the high use of note-taking strategies by low-proficiency students, this result seems to be in contrast to that of O’Malley et al. (1985b), who found that note-taking was used equally frequently by both beginners and advanced students. A probable explanation for this result is that the low-proficiency students in this study may feel that they need to depend on their notes, whereas the high-proficiency students rely more on indirect approaches (i.e., reading) in their vocabulary study.

Given also the result that both groups of students in the present study do not differ in memorization strategies, this finding does not support some other studies (e.g. Henning 1973) that students at different levels of proficiency resort to different strategies for memorizing vocabulary items. This result also does not support Cohen and Aphek’s (1980) and Cohen’s (1987) view that higher language proficiency may help to generate certain strategies. The reason for this result is, however, not apparent to me. As regards the reliance on L1 by the low-proficiency students in the present study, the result appears to be compatible with findings in the literature (e.g. Ahmed 1989)

Level of achievement
The results of the survey reveal that overall vocabulary strategy use and also the use of the seven vocabulary strategy categories do not vary significantly according to level of achievement. Moreover, only 3 individual items out of 63 vary significantly according to level of achievement. It is striking that no major differences have been found in the survey between the two groups of students.

The result of the survey regarding the level of achievement is in clear contrast to findings in the literature. A considerable number of studies (Tyacke & Mendelsohn 1986; Gillette 1987; Chamot & Kupper 1989; Ahmed 1989; Kojic-Sabo & Lightbown 1999) have shown that high-achiever students use a larger quantity and
wider variety of strategies than low-achievers. This result is also incompatible with that of the multiple cases part of the present study, since major differences have been found between the successful and less successful learners’ vocabulary strategy use. This disparity between the results of the multiple cases and the survey was explained in Chapter Seven (7.5.1.3), where two possible reasons were given. The methodological implication of this point will be dealt with in sub-section 8.4.3.

Situational factors
Course type
The results of the survey show that overall vocabulary strategy use varies significantly with course type, in that morning-course students reported greater vocabulary strategy use than evening-course students. Furthermore, the use of four vocabulary strategy categories (dictionary use, memorization, practice, and expanding lexical knowledge) vary significantly according to course type: morning-course students reported greater vocabulary strategy use in these four categories than evening-course students. As for the individual strategy items, 26 out of the 63 individual vocabulary strategy items included in the VSQ vary significantly by course type: 20 items out of 26 were used significantly more often by morning-course students than by evening-course students.

This finding confirms somewhat those of Oxford and Nyikos (1989) that course status has a relationship with students’ strategy use. The result also supports, to some extent, Atherton’s (1995) and Nakamura’s (2000) findings that the learning environment is an important factor in strategy choice and use, inasmuch as there are differences between the two courses held at ITANA in terms of teaching methods and teachers’ expectations.

Moreover, given the fact that students on the two courses (morning-course and evening-course) differ in their goals, motivation, background and career positions and orientations, the result of the survey in relation to course type confirms to some extent the importance of learners’ goals (Politzer & McGroarty 1985; Nyikos & Oxford 1993), learners’ motivation (Oxford & Nyikos 1989), learners’ backgrounds (Ehrman 1990) and learners’ career positions and orientations (Politzer & McGroarty 1985; Ehrman & Oxford 1989; Oxford & Nyikos 1989) in strategy use. This suggests
that some factors seem to be closely related to each other, and consequently it is difficult to deal with different factors individually without taking into account other related factors.

**Variety of Arabic used out of class**

The results of the survey show significant variation in students' overall reported vocabulary strategy use according to the variety of Arabic used out of class. Furthermore, the use of four vocabulary strategy categories (memorization, practice, metacognitive and expanding lexical knowledge) has been found to vary significantly according to the variety of Arabic used out of class. In both the overall vocabulary strategy use and the use of these four categories, students who use Standard Arabic report greater vocabulary strategy use than students who use Colloquial Arabic, and students using Colloquial Arabic report greater overall vocabulary strategy use than students who do not use Arabic at all. As for the individual strategy items, 26 individual items out of 63 vary significantly according to the variety of Arabic used out of class: 17 out of the 26 significant items were used significantly more often by students who use the Standard variety of Arabic than by students in the other two groups.

Although it is not possible to compare this result with other studies since this factor is unique to the TAFL context, this result confirms to some extent the importance of situational factors in vocabulary strategy use (Ellis 1994). In addition, given that AFL students' decisions to use Standard Arabic or Colloquial Arabic might be related to their goals, this result confirms somewhat the importance of learners' goals in strategy use (Politzer & McGroarty 1985; Nyikos & Oxford 1993). However, this conclusion should be drawn with some caution because of the unequal group sizes involved in this factor. Nevertheless, students' decision regarding the diglossic situation in Arabic, and its effect on learning should receive more attention from researchers in the TAFL field.

**Social factor**

**Religious identity**

The results of the survey demonstrate that the overall use of vocabulary learning strategies does not vary significantly with religious identity. On the other hand, the
use of two vocabulary strategy categories (non-dictionary strategies for discovering the meanings of new words and expanding lexical knowledge) varies significantly with religious identity: Muslim students reported greater strategy use in these two categories than non-Muslims. As for the individual strategy items, only 15 items out of 63 vary significantly according to religious identity in which 11 out of 15 items showing significant variation were used significantly more often by Muslim students than by non-Muslims.

This result demonstrates, to some extent, the importance of social factors in strategy use (William & Burden 1997), though it is not possible to compare it with other previous studies since none has examined religious identity in relation to strategy use. However, this conclusion must be taken with some care because of unequal group sizes.

The findings of the survey would suggest, then, that situational and also social factors should be given particular attention when assessing learning strategies and that the relationship between individual factors and strategy use may be less important or probably more complicated than is assumed in the literature.

The major findings of the present study having been discussed, the following section will consider its implications.

8.4 Implications of the Study

8.4.1 Implications for our understanding of vocabulary learning strategies and vocabulary learning

The implications for our understanding of learning strategies and vocabulary learning can be summarized as follows:

- The study of vocabulary learning strategies can benefit from the three-level description of strategies.
- Strategies are used in particular combinations and orders.
- Indirect and direct vocabulary learning approaches are both important.
- Independence strategies are essential for successful language learning.
- Most vocabulary learning seems to occur outside the classroom.
The study of vocabulary learning strategies can benefit from the three-level description of strategies

It has been found useful to describe what students do to learn Arabic vocabulary in three different levels: main strategy level, strategy level and substrategy level. This three-strategy level is not conclusive and further studies may need to identify more levels of strategies. However, while the first level, which includes the seven main strategy categories adopted in the present study, was important in conducting the study, the major differences between the two groups of the successful and less successful learners lie in the use of strategies within the other two levels. Researchers can benefit from such description of strategy levels and they should also focus on low-level strategies along with high-level ones in differentiating between good and poor learners.

Strategies are used in particular combinations and orders

The results of this study suggest that learning strategies are not used in isolation, but in particular combinations and certain orders, which may characterize different language learners and are probably the secret of language learning success. Consequently, a particular strategy might be effective not by itself, but through its combination with, or its occurrence before/after, other strategies. Researchers should, therefore, take this aspect of strategy use into consideration when studying the learning process.

Indirect and direct vocabulary learning approaches are both important

The results of the multiple cases indicate that although the successful learners adopt incidental approaches by reading Arabic materials to learn Arabic vocabulary, they also use explicit learning techniques such as taking notes of new items, memorizing by repeating new words and so on. This would suggest that both approaches are necessary to vocabulary learning and probably complement each other. Researchers should, thus, focus on both approaches when investigating vocabulary acquisition.

Independence strategies are essential for successful language learning

It has been found that expanding lexical knowledge strategies are among the most important vocabulary learning strategies distinguishing the successful language learners from the less successful ones. This would suggest that learning strategies
that contribute to the independence and autonomy of second language learners are crucial for language learning success. Consequently, materials designers should promote awareness of the significance of independence among students.

Most vocabulary learning seems to occur outside the classroom

The results of the multiple cases demonstrate that most vocabulary learning appears to take place out of class. In class, AFL learners seem to discover the meanings of new words, take notes and employ some memorization and practice strategies, whereas out of class they apply all types of vocabulary learning strategies. Despite this, researchers should focus on both in-class and out-of-class strategies when examining vocabulary learning strategies, as what students do outside class may sometimes depend on what they do in the class, and both types of strategies complement each other.

8.4.2 Implications for vocabulary teaching in the TAFL context

In the light of the results of the present study, which suggest that AFL learners actively employ different vocabulary learning strategies, and given the fact that vocabulary learning strategies are neglected in TAFL classes, my suggestion is that the TAFL curriculum needs to take account of learning strategies in an explicit and comprehensive way in order to provide consistent and coherent guidance for both teachers and students.

An awareness is required on the part of the teacher of the range of possible individual learning strategies among learners in the classroom, and that learning strategies are significant for language learners. To understand the needs of their students, TAFL teachers may examine the strategies that their students already employ by means of questionnaires or verbal reporting. By doing so, teachers may recognize the strategy repertoires of their students and raise their awareness of their strategy use. Consequently, TAFL teachers may introduce explicitly all types of strategies and give their students the freedom to choose the right ones. Learning strategies should, therefore, be included and implemented within the curriculum. This can be done, depending on the circumstances, either by incorporating learning strategies into teaching materials or by introducing strategies as extra-curricular activities. In
addition, strategy combination and strategy order should be taken into account when introducing learning strategies to students.

In discovering the meanings of new words, AFL students should be less dependent on their teachers. Nation (1990) claims rightly that giving meaning prevents students from applying the strategy of repeated attention to new words which is important for vocabulary learning, and that giving meaning also takes away the opportunity for learners to use their guessing skill. Consequently, TAFL teachers should make clear to their students, especially the poor ones, the importance of the strategy of guessing and also train them in how to guess.

Dictionary use seems to be discouraged in the TAFL classroom and dictionary use skills appear to be somewhat ignored. In order to develop the capacity for independent learning, students should be accustomed to making effective use of dictionaries. In addition, the efficient use of reference materials is an important part of students’ education (Horsfall 1997). AFL learners should, therefore, be introduced to different dictionary use strategies and skills. Many useful suggestions and practical advice for effective and interactive dictionary use strategies are provided in Allen (1983), Thompson (1987) and McCarthy (1990).

Given that all the monolingual dictionaries used by the participants in the multiple cases are intended for native speakers, monolingual Arabic dictionaries for foreign learners, designed to suit different types of students, are needed. Moreover, the results suggest that there is a tendency to regard dictionaries as decoding instruments only. AFL students should, therefore, be instructed in how to use dictionaries for both decoding and encoding purposes.

The results also suggest the need for TAFL teachers to intervene and advise on the note-taking process. AFL learners should be instructed to use various word-grouping strategies when taking notes, and should be introduced to a wide variety of ways of organizing their notes to facilitate learning. By highlighting findings from memory and language research, Schmitt and Schmitt (1995) have given teachers practical advice on setting up well-organized and pedagogically-sound notebooks for their students.
Furthermore, AFL learners may receive instruction on the use of various mnemonic devices to facilitate the memorization of new vocabulary items. The importance of vocabulary learning practice, particularly in natural situations, must also be made clear to AFL learners. Further, students can be instructed to identify their problems, try different strategies to overcome them, test themselves and set goals for their vocabulary learning. Through the use of these metacognitive strategies, it can be ensured that students monitor and evaluate their vocabulary learning and that they are using strategies in an effective way.

Finally, AFL learners must be trained to be independent and autonomous language learners. TAFL teachers should explain to their students, especially the poor ones, the importance of exposure to various materials other than classroom materials in order to expand their lexical knowledge; “pupils need to take charge themselves of the process of expanding their vocabulary, so that they feel they have some control over their own learning” (Horsfall 1997: 8). AFL learners should also be encouraged to read in Arabic outside class.

8.4.3 Implications for strategy research methodology

It is evident that the multiple cases approach is useful for investigating the relationship between strategy use and success, which is highly complex and cannot be satisfactorily detected by the survey approach. While the survey was useful in eliciting general trends, especially in terms of the variation and quantity of learners’ reported vocabulary strategy use, it proved to be limited in the sense that important information about the quality of vocabulary strategy use was missing. On the whole, the multiple cases method has been found more useful and revealing for investigating the relationship between strategy use and success. It is, therefore, suggested that more studies concerning this relationship should be conducted using this methodology. In this way, the aim of understanding the complexity of strategy use can be best achieved.

Although diary-keeping has been found to be a good research tool, further studies using diaries should take into account that students may not give complete written reports if they do not receive training on how to report their strategies. This study has
also highlighted the importance of checking the clarity and completeness of students' written reports by conducting follow-up interviews.

The literature on strategy research shows that interviewing is very productive for data collection (Naiman et al. 1978; O'Malley & Chamot 1990). The present study has confirmed this claim and shown that the interview was also able to reveal certain strategy combination and order. Moreover, this study has drawn attention to the significance of questioning techniques, in particular probing techniques for in-depth interviewing and techniques for extending and clarifying the interviewees' statements.

8.4.4 Implications for further research
This study is the first empirical study on vocabulary learning strategies conducted in the TAFL context in Saudi Arabia. Therefore its findings need to be confirmed. Further research can replicate this study, with some relevant adjustments to the research methodology in different TAFL institutions in Saudi Arabia with different AFL learners. The accumulation of findings can add to our understanding of the use of vocabulary learning strategies by AFL students and of the effect of instructional methods and individual differences on strategy use.

Several aspects of the methodology of the present study can be further improved or modified in many ways. The present study has investigated the vocabulary learning strategies used by AFL learners, the students being asked to respond in Arabic. Similar studies can be conducted allowing learners to use their mother tongue to report their strategies.

The multiple cases in the present research relied only on high-proficiency students. It would be useful to undertake a study similar to the present one but with low-proficiency students.

This study used students' exam results and teachers' judgement to assign the successful and less successful learners. Other measurements of learners' language proficiency and achievement could be used in future research.
This study has investigated vocabulary learning strategies by examining seven aspects of vocabulary learning: non-dictionary strategies for discovering the meanings of new words, dictionary use, note-taking, memorization, practice, metacognitive strategies, and expanding lexical knowledge. It is possible that these seven categories reflect a natural sequence of learning vocabulary items, but further studies are needed to examine this linear order, since this study did not intend to investigate the occurrence of this order. Other studies can investigate each aspect individually. The results of such studies may provide a fuller picture of students’ strategies for each aspect.

Further research should focus on strategy combination and the order of and links between strategies. I would suggest that more multiple cases should be conducted in order to investigate vocabulary learning strategies more deeply and to allow the researchers to study combination/order of strategies more effectively. In addition, researchers should employ research methods designed for this purpose. Introspection may be the most suitable method for capturing this phenomenon. Interviews might also be useful in this regard if they are conducted in certain ways.

Some researchers (Oxford & Crookall 1989; Koda 1994, 1997) have argued that the orthography of a student’s first language might have an impact on the use of learning strategies. However, in the survey part of this study no major distinctions in vocabulary strategy use were found between students whose first language has a script similar to Arabic and those whose first language has a different script. Further studies using the multiple cases approach can examine this factor in relation to vocabulary strategy use.

Finally, further research should examine the relationship between vocabulary strategy use and the situational factor, the variety of Arabic used out of class, and the social factor, religious identity, but with relatively equal group sizes.

8.5 Conclusion

The present study has shed some light on the use of vocabulary learning strategies by AFL learners in Saudi Arabia, though it has limitations. The significance of the study
is that it was applied to Arabic in a different learning environment from TESOL contexts. It is also marked by its methodology, which combined multiple cases and a survey.
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APPENDICES

APPENDIX 1: Diary-keeping (English version)

THE CHART

Instructions for completing the chart:

1. Take a few minutes each day to ask yourself whether you did something in order to learn vocabulary AT HOME.

2. If the answer is yes, write down what you did. Be as specific as possible.

3. Describe briefly how you did what you did.

4. Indicate whether what you did is something you usually do or whether you just happened to do it.

5. I am interested in your strategies regarding the following aspects of vocabulary learning:

   - How you discover the meanings of new words (e.g., using dictionary, asking a colleague).
   - What type of dictionary you use (e.g., Arabic-Arabic dictionary), and what information do you look for when using the dictionary (e.g., word meaning, example of usage).
   - Where you record the new words that you are learning (e.g., in a special vocabulary notebook, in the textbook), how you organise and group the words in your record (e.g., as encountered in the textbook), and what information you record in your notes (e.g., mother-tongue equivalent, antonym).
   - What techniques you use in order to memorise new lexical items (e.g., repeating words orally).
• How you practise newly learnt words (e.g., in speaking with colleagues).

• How you plan and evaluate your learning of vocabulary (e.g., preparing yourself before class, reviewing the words you have learnt).

• Whether you learn words obtained from outside the course and, if so, how (e.g., watching TV, reading books).

6. Include all the words that you have learnt in the chart (put them in the appropriate section of the chart).

7. When you ask yourself each day the question “what did I do today in order to learn vocabulary?”, remember that there are no right or wrong answers.

Thank you for your cooperation.
Saturday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
Sunday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
Monday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
Tuesday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
Wednesday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
Thursday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
Friday

What did I do today to learn vocabulary?

I have learnt today the following vocabulary items:
APPENDIX 2: Diary-keeping (Arabic version)

إرشادات لإكمال الجدول

1. خصص كل يوم بضع دقائق لتسجيل نفسي إذا كنت قد عملت شيئاً لتتعلم كلمات جديدة في البيت.

2. فضلاً أكتب ما قمت به وكن دقيقةً قبل المستطاع.

3. صف بأختصار الطريقة التي اتباحتها عندما قمت بذلك العمل.

4. وضع إذا كان ما قمت به هو شيء تفعله دائماً أم أنك قمت به اليوم فقط.

5. أنا مهتم بنشاطك فيما يتعلق بالجوانب التالية:

- ما الطرق التي تب债权 لتعرف على معاني الكلمات الجديدة (مثال: تبحث عن معنى الكلمة في المعجم أو
  تسأل زميل لك عن معناها).
- أي نوع من المعامح تستخدم (مثال: معجم عربي-عربي), وما المعلومات التي تبحث عنها عادة في
  المعجم (مثال: معاني الكلمات، معلومات صرفية).
- أين تسجل الكلمات الجديدة التي تعلمتها (مثال: في دفتر خاص بالكلمات الجديدة، على الكتب)،
  وكيف تنظم وترتب هذه الكلمات (مثال: النبات، حسب الدروس)، وما المعلومات التي تسجلها (مثال:
  مصادر الكلمة، مثل لاستخدام الكلمة).
- ما الأساليب التي تستخدمها لتساعديك في حفظ الكلمات الجديدة (مثال: ترديد الكلمات).
  كيف تمارس أو تستخدم الكلمات الجديدة (مثال: في حديثك مع زملائك).
  كيف تخطّط وتقوم عملية تعلمك للمفردات (مثال: مراجعة الكلمات التي تعلمتها).
- إذا كنت تتعلم كلمات من خارج الكتاب، اذكر ذلك مع ذكر مصادرك (مثال: التلفاز، قراءة
  الكتب).

6. ضع كل الكلمات التي تعلمتها في المكان المخصص لذلك في الجدول.

7. عندما تسأل نفسك يومياً هذا السؤال: (ماذا قمت به اليوم لأنتم كلمات جديدة)، تذكر أن لكل إنسان
  طريقته وليس هناك إجابة صحيحة أو خاطئة.

شكرًا لك على تعاونك

1Two pages only are given because of space restrictions and the full version is available from the researcher.
لاست

ماذا فعلت اليوم لأتعلم كلمات جديدة؟

تعلمت اليوم الكلمات التالية:
APPENDIX 3: Background Questionnaire (English version)

Name:

Age:

Nationality:

First language:

Level:

Why are you learning Arabic?

What was your job in your country?

Can you describe your background education?

Do you speak other languages apart from your first language and Arabic?

If yes, which language(s)?

Did you learn Arabic before coming to Saudi Arabia?

If yes, where and for how long?

From which level did you start learning Arabic in the Institute?

( ) the first level ( ) the second level ( ) the third level ( ) the fourth level

Did you study a particular level more than once?

If yes, which level and how many times?
APPENDIX 4: Background Questionnaire (Arabic version)

معلومات عامة

الاسم:
العمر:
الجنسية:
لغتك الأم:
المستوى الدراسي:
لماذا تتعلم العربية؟
ما وظيفتك في بلدك؟
هل من الممكن أن تصف سيرتك الدراسية؟
هل تحدث لغات أخرى غير لغتك الأم واللغة العربية؟
إذا كان الجواب نعم، فما هذه اللغة (أو اللغات)؟
هلسبق أن تعلمت العربية قبل مجيئك إلى السعودية؟
إذا كان الجواب نعم، فاذكر أين تم ذلك واذكر المدة التي استغرقتها في تعلم العربية.
من أي مستوى بدأت تعلم العربية في المعهد؟
هل درست مستوى معين أكثر من مرة؟
إذا كان الجواب نعم، فاذكر ما هو المستوى وكم مرة درسته.
APPENDIX 5: Interview Guide

Q1a When the teacher introduces a new word in the class, how do you discover its meaning? Give him three examples from the words introduced in the class and ask him how he discovered their meanings. Do you use the same procedures with all words you encountered in any lesson with different teachers, or do you use other techniques depending on the situation?
Prompts: Ask the teacher? Ask classmates? Use a dictionary? Guess its meaning Ignore it? All of these things
If a participant does not mention some of the prompts, I will ask him about them. (e.g., Do you use dictionaries? Do you try to guess the meaning?)
When do you use each of these sources and why?
Do you pay attention to every new item you come across in the class? If no, which items do you pay attention to?

1b If you ask somebody (teacher or classmate), what information do you ask about?
Ask him about three words just introduced in the class
Prompts: Arabic synonym/antonym/paraphrase? English equivalent? A sentence illustrating usage? Mother-tongue equivalent? All of these things?
Do you do this always with all words introduced in any lesson, or only with these three words? If only with these words, what do you ask about other words?

Q2a What type of dictionary do you usually use?
Do you use Arabic-Arabic? Arabic-First language? Arabic-English?
Why have you chosen this dictionary?
When do you use the dictionary and why (reasons for looking up)?

2b What information do you look for when using the dictionary?
If the learner used the dictionary to discover the meanings of words just introduced in the class, I will ask him about three words?
Prompts: Meaning? Grammatical information (i.e. word class, its plural, its inflection)? A sentence illustrating word usage?
Do you do this with all words you look up, or only with these words?
If only with these words, what information do you look for when looking up any other word?
Which types of words do you look up?

Q3a Do you take notes regarding new words introduced in the class?
Have you recorded the words just introduced in the class?

3b If yes, where have you recorded them? Do you do this always in any lesson?
If no, do you never record words in any lesson, or just today? If just today, where do you usually record your notes?
Prompts: In the margins of textbooks? A separate notebook? Both? A separate notebook for each subject (module)?
Why do you take notes of new words?

3c How do you organise words in these notes?
Ask him about the words introduced in the class.
Prompts: Alphabetically? In the order encountered in the class? In terms of meaning relation (i.e. similar words together)? In terms of the word’s root? In terms of groups (i.e. animals, vegetables)?
Do you do this always with all words you encounter in any lesson, or only with these words? If only with these words, what other procedures do you follow?

3d What information do you usually record in your notes?
Ask him about some of the words introduced in the class.
Prompts: Arabic synonym/antonym/paraphrase? Mother-tongue equivalent? English equivalent? Sentences illustrating usage? Grammatical information? All this information?
Do you do the same thing always with all words you study in the class or only these words? If only with these words, what do you record regarding other words introduced in different lessons?

Q4a How do you memorise new words which have been introduced in the class?
Do you apply particular techniques to help you remember these words?
Give him three examples from the words introduced in the class, and ask him how he will attempt to memorise these words?
Do you use the same techniques with all words? If you use other techniques, please tell me about these.
Prompts: Associate them with other Arabic words? Associate them with words in your first language? Associate them with the context in which they appeared? Associate them with some events you have experienced?

4b When you have memorised a word, how do you make sure that you can recall it when needed?

4c If one reports that he memorises words by repeating them, I will ask him:
How do you repeat? How many times do you repeat a word? Do you repeat word form or meaning, or both? Do you repeat silently or aloud, and orally or in writing or both?

Q5a When you study and memorise the words introduced in the class, do you try to make use of them inside or outside the class (in speaking or in writing)?

5b If yes, how? Please explain what do you do when you do these activities.
Prompts: Talk to teachers? Talk to classmates? Writing in Arabic using new words? Talk to yourself in Arabic?
If in speaking, in what situations, with whom, how do you do this practice,
and how often?
If in writing, what activities, and how do you make use of words in these activities?

Q6a Do you review the words you have learnt in the class?

6b How? Please describe how do you do this reviewing.
6c How often? How many hours do you spend in learning vocabulary daily and weekly?

6d Did you study the words just introduced in the class before coming to the class? If yes, do you do this always or sometimes and how? If no, when do you study the words before coming to the class?

6e If you want to test yourself on the words introduced in the class, what will you do?
Prompts: Test yourself using word lists? Ask someone to quiz you about some words?

6f How often do you test yourself on new words you have learnt?

6g What are your objectives for learning vocabulary? How do you meet these objectives?

6h What are the most significant difficulties in your vocabulary learning? How do you try to overcome these difficulties?

Q7a Do you study words learnt from sources outside the curriculum?

7b If yes, how and what are your sources?

7c Why do you employ these sources? How do you choose words to be learned, and what are your criteria for selecting to-be-learnt words?
When do you decide to learn a particular word?
When do you decide to skip or pass a particular word?
When you read a book, listen to tapes etc. is your intention to learn new words or to improve your general proficiency in Arabic?

7d Can you tell me what you know about Standard and Colloquial Arabic? Do you study colloquial words? If yes, why and how? What are your sources?
NOTE. When giving the learner examples of the words introduced in the class, I attempted to use examples with different features, e.g., nouns vs. verbs, long words vs. short words, concrete vs. abstract.
APPENDIX 6: Background Questionnaire (English version)

Name:

First language:

Religion:  ( )Muslim  ( )Non-Muslim

Course type:  ( )Morning  ( )Evening

Level:  1  2  3  4

What variety of Arabic you usually use in speaking with Arabs outside the institute?

( )Standard  ( )Colloquial  ( )No Arabic
APPENDIX 7: Background Questionnaire (Arabic version)

معلومات عامة

الاسم:

للمهلك المام:

الديانة:

غير مسلم  ( )

مسلم ( )

البرنامج الدراسي:

السماوي ( )

المستوى الدراسي: 1 ( )  2 ( )  3 ( )  4 ( )

تقديرك في الفصل الماضي:

مقبول ( )

جيد جداً ( )

ممتاز ( )

أي نوع من العربية تستخدم عندما تتحدث مع العرب خارج المعهد؟

اللغوية ( )

اللغوية ( )

لا استخدم العربية مطلقًا ( )
Dear learner
Please mark the statements below in terms of how each of them describes the way you learn Arabic vocabulary. Please answer in terms of how well the statements describes you, not in terms of what you think you should do. There are no right or wrong answers to these statements. What we will learn from your responses will be used to help other students to learn Arabic. The numbers from 1 to 4 represent your responses. Please circle one.

1. NEVER TRUE OF ME  
2. SOMETIMES TRUE OF ME  
3. USUALLY TRUE OF ME  
4. ALWAYS TRUE OF ME  

NEVER TRUE OF ME means that the statement is very rarely true of you.

SOMETIMES TRUE OF ME means that the statement is true of you about half or less of the time.

USUALLY TRUE OF ME means that the statement is true more than half the time

ALWAYS TRUE OF ME means that the statement is true of you almost always.
PART 1. Please respond to these statements in terms of how each of them describes the way you discover the meanings of new words.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

1. When I encounter a new word in the class, I ask my teacher about its meaning.

2. When I ask my teacher about a new word, I ask him for an Arabic synonym or antonym.

3. If I could not ask my teacher about a word, I ask a colleague.

4. In class, I guess the meaning of the word I do not understand then I ask my teacher for confirmation.

5. When I face a new word, I check for L1 cognate.

6. When I hear a new word used by a native speaker, I ask them about its meaning.

7. I look up new words in the textbook glossary.

8. When I ask the teacher about a new word, I ask him for an example of its usage.

Others (please specify)...........................................................................................................................
PART 2. Please respond to these statements in terms of how each of them describes the way you use the dictionary.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

1. I look up new words in an Arabic-L1 dictionary. 1 2 3 4
2. When I look up a word in the dictionary, I look only for its meaning. 1 2 3 4
3. I look up new words in an Arabic-L1 dictionary then in an Arabic-Arabic dictionary or vice versa for confirmation. 1 2 3 4
4. When I look up a word in the dictionary, I look for example of its usage. 1 2 3 4
5. When I get interested in another new word in the definition of the word I look up, I look up this word as well. 1 2 3 4
6. I look up new words in the electronic dictionary. 1 2 3 4
7. When I look up a word in the dictionary, I read the whole entry. 1 2 3 4
8. I use an Arabic-English dictionary to discover the meanings of new words. 1 2 3 4
9. When I look up a word in the dictionary, I look for its synonym and antonym. 1 2 3 4
10. I use an Arabic-Arabic dictionary to discover the meanings of new words. 1 2 3 4
11. When I look up a word in the dictionary, I look for its inflection. 1 2 3 4

Others (please specify): ............................................................................................................
PART 3. Please respond to these statements in terms of how each of them describes the way you take notes regarding new vocabulary items.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

1. I specify a vocabulary notebook for each module. 1 2 3 4
2. In my notebook, I record mother-tongue equivalent of each word. 1 2 3 4
3. I write down the short vowels of each word in my notebook. 1 2 3 4
4. In class, I write down the meanings of new words only on the textbook. 1 2 3 4
5. In my notebook, I write down the synonym and antonym of each word. 1 2 3 4
6. I organize words alphabetically in my notebook. 1 2 3 4
7. I record the inflection of each word in my notebook. 1 2 3 4
8. I arrange the words according to the lessons in my notebook. 1 2 3 4
9. In my notebook, I record the plural of each noun. 1 2 3 4
10. I write down examples showing the usage of the word in my notebook. 1 2 3 4
11. I record the conjugation of each verb in my notebook. 1 2 3 4
12. In my notebook, I write down English equivalent of each word. 1 2 3 4
13. I specify a notebook for words learnt from outside the curriculum. 1 2 3 4

Other (please specify) ..................................................................................................
PART 4. Please respond to the following statements in terms of how each of them describes the way you memorize new lexical items.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

1. I discuss word meaning and usage with a colleague to commit to memory. 1 2 3 4
2. When I try to remember a word, I remember the sentence in which the word is used. 1 2 3 4
3. I repeat words orally and in writing to memorize them. 1 2 3 4
4. I memorize together words that share the same root. 1 2 3 4
5. To memorize new words, I write them on one side of a card and their explanations on the other side. 1 2 3 4
6. I use newly learnt words in speaking to help me commit them to memory. 1 2 3 4
7. When I memorize a word, I connect it to its synonyms and antonyms. 1 2 3 4
8. I associate a new word to a known Arabic word that looks similar to help to commit to memory. 1 2 3 4
9. I deliberately study word-formation rules in order to remember more words. 1 2 3 4
10. I associate a new word to a known Arabic word that sound similar to help to commit to memory. 1 2 3 4
11. I memorize words by repeating them orally. 1 2 3 4

Others (please specify)...........................................................................................................
PART 5. Please respond to the following statements in terms of how each of them describes the way you practise newly learnt words.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

1. I practise newly learnt words when speaking with someone. 1 2 3 4
2. I try to make use of newly learnt words in imaginary situations. 1 2 3 4
3. I pay attention to newly learnt words when used by native speakers. 1 2 3 4
4. I use newly learnt words in speaking with colleagues in class whenever possible. 1 2 3 4
5. I practise newly learnt words by using them in sentences. 1 2 3 4
6. I use newly learnt words in speaking with the teacher in class whenever possible. 1 2 3 4
7. I try to make use of newly learnt words when writing in Arabic. 1 2 3 4

Others (please specify) ........................................................................................................
PART 6. Please respond to the following statements in terms of how each of them describes the way you plan, organize and evaluate your learning of new words.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

<table>
<thead>
<tr>
<th></th>
<th>1. I review newly learnt words in a regular basis.</th>
<th>1234</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. I study new words in the textbook before the lesson.</td>
<td>1234</td>
</tr>
<tr>
<td></td>
<td>3. I ask a colleague to test me about some of the words that I have learnt.</td>
<td>1234</td>
</tr>
<tr>
<td></td>
<td>4. I study new words introduced in the class when go home.</td>
<td>1234</td>
</tr>
<tr>
<td></td>
<td>5. I pay attention to every unknown word introduced in the class.</td>
<td>1234</td>
</tr>
<tr>
<td></td>
<td>6. I test my self about some of the words that I have recorded.</td>
<td>1234</td>
</tr>
<tr>
<td></td>
<td>7. I spend a lot of time studying and memorizing new words.</td>
<td>1234</td>
</tr>
</tbody>
</table>

Others (please specify)...........................................................................................................................................
PART 7. Please respond to the following statements in terms of how each of them describes the way you expand your vocabulary knowledge.

1. Never true of me
2. Sometimes true of me
3. Usually true of me
4. Always true of me

1. I learn new vocabulary items when reading Arabic books. 1 2 3 4
2. I learn new words when reading the Holy Quran. 1 2 3 4
3. I pick up new words when I read newspapers. 1 2 3 4
4. I learn new words when I listen to cassettes (speeches and sermons). 1 2 3 4
5. I pick up new vocabulary items when listening to radio. 1 2 3 4
6. I pick up new words when speaking with native speakers. 1 2 3 4

Others (please specify)........................................................................................................

THANK YOU SO MUCH FOR YOUR COOPERATION
APPENDIX 9: Vocabulary Strategy Questionnaire (Arabic version)

استبانة تعلم المفردات

عزيري المتعلم

ستحدث في هذه الاستبانة عبارات تتعلق بنظم المفردات العربية. فضلاً أقرأ كل عبارة ثم أجب بـ نـاء
على درجة تمثل كل عبارة لطريقتك في تعلم المفردات العربية وليس بناء على ما ينبغي أن تـ قوم
به. واعلم أنه لا توجد إجابات صحيحة وأخرى خاطئة وإنما اختلاف في أساليب الناس وطرق
تعلهم. والدرجات التالية تمثل كرة الممارسة وقلتها بالنسبة لك وهي أربع درجات، وقد
اكتملت بعض أرقامها أمام كل عبارة، فما عليك إلا وضع دائرة حول الرقم الذي يمثل اختيارك.

هذه الدرجات هي:

1. أفعل ذلك قليلاً
2. أفعل ذلك أحياناً
3. أفعل ذلك غالباً
4. أفعل ذلك دائماً

أفعل ذلك قليلاً تعني أن النشاط الذي تصفه العبارة نادر حدوثه بالنسبة لك.
أفعل ذلك أحياناً تعني أن النشاط الذي تصفه العبارة تقوم به نصف الوقت أو أقل من نصف
الوقت.
أفعل ذلك غالباً تعني أنك تقوم هذا النشاط أغلب الوقت، أي أكثر من نصف الوقت.
أفعل ذلك دائماً تعني أنك تقوم بهذا النشاط طوال الوقت وفي مختلف الظروف.

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1 Two pages only are given because of space restrictions and the full version is available from the researcher.
الجزء الأول

ضع دائرة حول الرقم الذي يمثل طريقتك في التعرف على معاني الكلمات الجديدة.

1. أفعل ذلك قليلاً
2. أفعل ذلك أحياناً
3. أفعل ذلك غالباً
4. أفعل ذلك دائماً

1. عندما تقابلين كلمة جديدة في الفصل أسأل أستاذك عن معناها.
2. عندما أسأل أستاذك عن كلمة جديدة أسأله عن مراذفها وعكسها.
3. أسأل أحد زملاءك عن معنى الكلمة الجديدة عندما لا أستطيع أن أسأل الأستاذ.
4. في الفصل أحم (أحاول أن أتوقع) معنى الكلمة الجديدة ثم أسأل المدرس عن معناها للتأكيد.
5. عندما أواجه كلمة جديدة أبحث في لغتي الأم عن كلمة من نفس الجذر أو الأصل.
6. عندما أشعر كلمة جديدة من شخص عربي أسأله عن معناها.
7. أبحث عن معاني الكلمات الجديدة في المعجم الموجود في آخر الكتب.
8. أطلب من الأستاذ أن يضع الكلمة الجديدة في مثال حتى أعرف طريقة استخدامها.

إذا كنت تقوم بنشاطات أخرى تتعلق بالتعرف على معاني الكلمات الجديدة، فضلًا أكتبها أسفل.

1.
2.
3.