Overcoming Unknown Words

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التغلب على صعوبة الكلمات غير المعروفة

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الملخص

هذا البحث هو دراسة استكشافية لمعرفة مهارات القراءة التي استخدمها طلاب سعوديون في المرحلة الجامعية للتغلب على صعوبة الكلمات غير المعروفة أثناء قراءة نص باللغة الإنجليزية . علماً أن القدرة اللغوية للطلاب المشاركين هي بالمستوى المتوسط ويدرسون في المستوى الأول الجامعي في جامعة الإمام محمد بن سعود الإسلامية ، قسم اللغة الإنجليزية والترجمة.

هدف الدراسة هو التعرف على مدى وكيف يستخدم المشاركون مهارات القراءة المذكورة في البحوث والدراسات السابقة (وهي التخمين، وطلب المساعدة، والتجاهل). تشير النتائج في هذه الدراسة إلى أن المشاركين يميلون إلى استخدام جميع المهارات ولكن بتركيز أكثر لطلب المساعدة. ويبدو أن مهارة التجاهل ليست مرغوبة بشكل كبير لديهم مقارنة بالمهارات الأخرى. وفي ضوء هذه النتائج استخلص الباحث عدداً من التوصيات للعاملين في مجال تدريس اللغة الإنجليزية كلغة ثانية.

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Abstract

This article discuses an exploratory study, which used questionnaire responses to identify the word-solving strategies (WSS)/ word attack skills used by Saudi university students when encountering an unknown word while reading an English text. The participants were low intermediate students in their first university level at the University of Imam Muhammad bin Saud, Algaseem branch.

The purpose of the study is to find out whether and how the participants would use the different word-solving strategies mentioned in the literature (i.e. guessing, appealing for assistance, and skipping). The findings suggest that all the participants had preferences in using all strategies but with some tendency to use appealing for assistance a little more. Skipping strategies do not seem to be very popular among the students vis-a-vis other strategies.

The article aims to suggest some implications for the field of teaching English as a foreign language.

Introduction

Some researchers such as Hosenfeld (1977, 1984), Nuttall (1982), and Alseweed (1996, 2000) have been carrying out different studies on L2 reading to help learners use reading strategies effectively and learn new information. Word attack or solving strategies (WSS) are part of these strategies, which are considered to be very essential for skilled reading in L2 (Nuttall, 1982). L2 readers encounter many unknown words while reading, which affect their comprehension process and consequently slow their reading and may make it burdensome.

The researcher chose to conduct his present study with undergraduate Saudi university students, who are less proficient than those in Alseweed (1996, 2000) to compare any different uses of WSS, if any, because of different EFL proficiency level. The focus here is on how WSS are used by L2 learners when encountering an unknown word while reading an English text. In particular the study focuses on the following question and hypotheses, which are derived from the preceding review of literature particularly Alseweed (1996).

Q. What WSS do Saudi L2 university students in the low EFL intermediate level use when they encounter unknown words while reading English written texts?

H1. All students would

a. use contextual guessing.

b. use morphological guessing.

c. use appeal for assistance [i.e. use the dictionary and/or asking someone].

d. use skipping.

H2. Because of their low EFL proficiency level ,students would

a. use local clues more than global clues.

b. use appeal for assistance more than any other strategy.

c. use skipping as the least strategy.

Method

Participants were 39 Saudi male undergraduate university students in

their first year studying English as a foreign language, who voluntarily participated in the study. They were studying in the English Language and Translation Department in Imam Mohammed bin Saud University, Algassem branch with a mean age of 19 years. Since they were living in the same area, they had almost no differences in their socio-economic status and cultural background. They had no different proficiency levels, as it was decided by their teachers and their last term general English exam assessment. These participants were studying in the same classroom.

All students had more or less the same exposure to English and the same number of years in studying English, which is six years. The students in Saudi Arabia usually study English as a foreign language as a requirement in the curriculum. They start at the middle school at the age of 12 for three years, then at the secondary school for three years, and finally at the university for four years with fewer hours, and sometimes optional unless the student's chosen subject is the English language as is the case of the participants of this study. They had the same past teaching history during their years of formal study in Saudi Arabia because the educational system in Saudi Arabia is the same all over the country for both public and private schools.

The nature of the study was explained to the students in general terms avoiding mentioning any details about the research. They were requested to be helpful and to take this study seriously, as it was aimed to help students in their reading programs. The total number of students was forty-six, but seven of them were absent on the day of distributing the questionnaire, which means only thirty-nine of them participated in the study.

The questionnaire (see Appendix) was given to them. The students answered the questions that were written in English in the classroom during the presence of the researcher, which took them 20-30 minutes to complete the whole questionnaire. Each question was followed by several statements, which represent the WSSs in the literature. The questionnaire was used by the researcher in a previous study (Alseweed, 1996) and found it effective and reliable.

Skills or strategies

Although the two terms 'skill' and 'strategy' are used in the literature, we still find vagueness in what each one means and whether it differs

from the other. For example, O'Malley and Chamot (1990) do not show a clear-cut distinction between the meanings of these two terms when defining both to mean the same definition of the term 'skill' mentioned by Oxford (1990: 6) to mean ability, expertness, or proficiency.

McDonough (1995) refers to skill differently from O'Malley and Chamot's, and Oxford's definitions but is consistent with Tarone's (1980) definition of 'strategy'. Tarone distinguishes between skill and strategy when she talks about language learning strategies and skill learning strategies. She defines the former as an attempt by the learner to learn the linguistic and sociolinguistic knowledge about L2, while the latter means the learners' attempts to be more proficient or skilful in writing, reading, speaking or listening. Tarone, then firstly shows a distinction between the usage of the two terms by considering 'skill' more global than 'strategies' i.e. a skill could include many strategies. Secondly, she does not include reading strategies which WSS are part of under learning strategies as Oxford does, but she suggests that reading is a skill that has learning strategies.

Although we cannot reach a clear-cut distinction between the more common two terms 'strategy' and 'skill' among researchers, in my opinion, it would be better if researchers adopted Tarone's definition in considering the term 'skill' as the broader one in which 'strategies' are included. In this article, I would use the distinction followed by Tarone referring to the term 'strategy' when discussion is about reading strategies and WSS (for more discussion about this issue, see Alseweed, 2000).

WSS and reading strategies

Coady's (1979) categorisation of reading strategies is, in my opinion, different in that unlike other classifications, Coady discusses only those strategies used when there is a lexical comprehension problem while reading. He clearly shows, in his classification, that the strategies are based on the type of knowledge utilised without mentioning their 'function' or how they are used. (For more about classification and function of reading strategies, see Alseweed, 2000).

Like Coady, Hosenfeld (1977), in her classification of the reading strategies, draws attention to those strategies that are implemented when lexi-

cal comprehension problems are encountered in reading. This is different from what she calls the reader's main meaning line strategies which readers use and could ascribe meaning of sentence(s) with no interruption. Hosenfeld's second category, which is compatible with Coady, is used as suggested by Hosenfeld, when the reader's main meaning line is interrupted. Once a reader comes across a lexical problem, there might be an urgent need for a remedy to this 'problem'. The strategies readers might use to solve this problem are what Hosenfeld calls word solving strategies. Nuttall (1982) agrees with Hosenfeld but she terms these strategies word attack skills.

When readers are interrupted by a lexical comprehension problem they may pause for a long or short period to use non-main meaning line strategies, which are WSS. This might mean that when readers have come across the problem word they have realised or identified that there is a disconnection of their comprehension. In other words, readers might be experiencing one or more of the causes that make some words difficult to be comprehended.

Identifying the difficult word

In some cases students misidentify the unknown word because of some causes that make it misunderstood although it might appear to the reader to be known (see for example Nuttall (1982), Bensoussan and Laufer (1984, 1988, 1997), Huckin and Bloch (1993), and Alseweed (2000). Since the focus of the present study is on the effect of the EFL proficiency level; these causes of difficulty will not be discussed here.

On the other hand, identifying a lexical problem, the readers would move from unconscious reading strategies processing to conscious WSS processing (for more about the reader being conscious and unconscious see Alseweed, 2000). Pausing because of a lexical problem whether it is as short as deciding on using skipping or as long as using a dictionary means that readers are aware of the problem. Being aware of the problem suggests that there is an attempt to overcome what they have thought of as an interruption to their normal reading process. For a reader to identify the lexical comprehension problem is very essential because it would be the first step to help in choosing the appropriate strategy to that partic-

ular word by the reader.

Different readers use different WSS depending on some factors. Alseweed (2000) discusses what he calls L2 readers possible sequence of WSS use where they take a step after a step once they face a difficult word. The point here is that identifying the problem is the first step that readers may be aware of, which might lead to the second step, i.e., choice of the strategy. These strategies are guessing or inferencing, appealing for assistance (referring to a dictionary/glossary, and asking someone) and ignoring or skipping.

Figure 1: L2 readers' possible sequences of WSS use
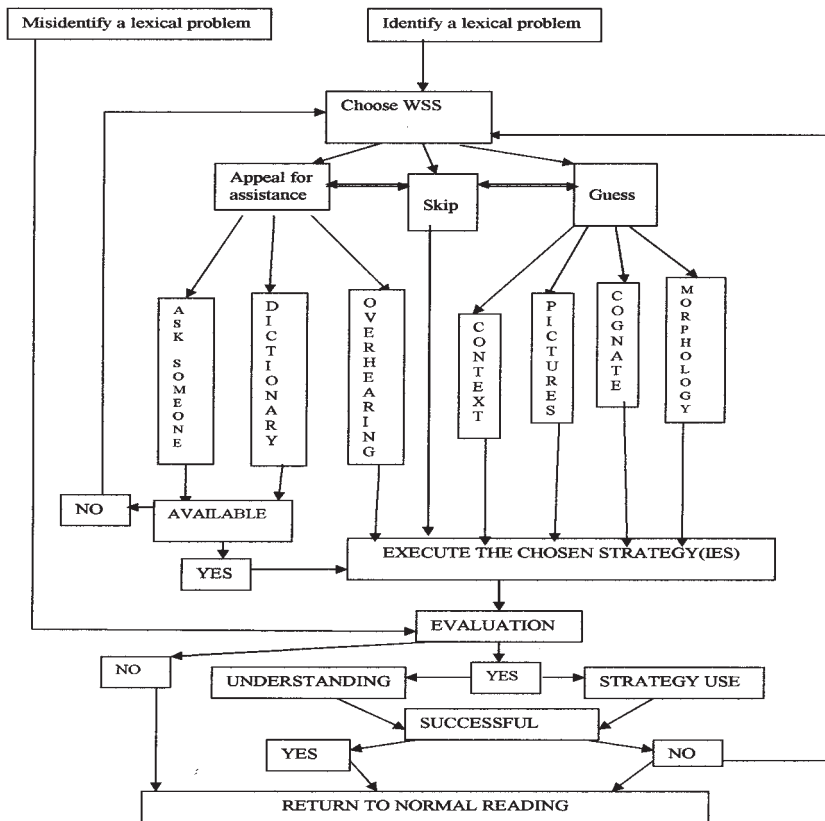
Source : Alseweed (2000)

Guessing

Guessing is a widely used strategy among L1 and L2 readers. Using guessing with unknown words in a written text might be affected by four elements to be available for the reader: the written text as a whole, unknown words, clues in the text, and the reader's knowledge (i.e. language and content schemata) including some knowledge about guessing (Alseweed, 1996, 2000).

There are two types of contexts. The first one is the specific context within the text which includes morphological, semantic and syntactic information in a particular text, while the second one is the general context or non-textual context, which is the background knowledge the reader has about the subject being read (Nation and Coady, 1988). Williams (1985) agrees with Nation and Coady in considering the specific context as 'the other words and sentences that surround that word ... It follows that other words in the context of the unfamiliar word often ,throw light on its meaning' (p.122). These other words or clues can be found in the sentence of the unknown word or other sentences beyond the sentence of the unknown word.

Non-textual context, on the other hand, includes clues such as pictures, tables and punctuation, and what is referred to by literature as ,the learner's schemata'. There are three types of this schemata: the content schemata, language schemata (i.e. knowledge about the target language such as graphic information and word formation), and formal schemata (e.g. different genres, cohesion and rhetorical information). Readers may also bring their L1 knowledge to the text as part of their background knowledge and experience which might distinguish L2 readers from L1 readers.

Carrell (1984) suggests that in order to understand a text, the reader needs to be able to interact both types of information in the textual and non-textual contexts. By exploiting available clues in the textual context and background knowledge, which is the non-textual context, readers may be able to guess the meanings of unknown words when using WSS. There is evidence from research that 40-80% of the hard words can be guessed correctly by non-native speakers from contextual clues (Nation, 1990).

Many L2 readers may find most authentic written texts full of difficult words, especially in academic texts, which suggests that L2 readers need to know how to use WSS and to locate available textual clues (Nuttall, 1982; Parry, 1991). When the guessing strategy is used successfully the learners' confidence in working out the meaning will increase. Na and Nation (1985) report that 85% of their L2 subjects' guesses were correct which suggests that if learners have the ability in using available clues in a text they would arrive at the meaning using this strategy.

Readers usually use two types of clues in contextual guessing: textual and non-textual. We will only discuss the former as this study focuses on it. There are two kinds of clues with respect to their location in the text being read that could be used in contextual guessing: local and global clues.

A local clue or immediate context clue is any clue located in the sentence or phrase where the unknown word is found. A clue to help in contextual guessing could be one or more of the remaining words in the sentence or phrase. Clues used in this sentence to help in guessing the unknown word contextually are called local (Haynes, 1993; see also Hosenfeld, 1977).

Defining the local clue to mean the clue located in the same sentence to uncover the meaning of the unknown word might be simplifying the process. It could be argued that the clue within the sentence of the problem word might not be solely the key to the meaning of the unknown word. There is the possibility that it might add more information to or be the most prominent clue for the unknown word. Some meaning may accumulate by the time readers reach the sentence with the unknown word because of reading the title, previous sentences and activating content schemata. Thus, we cannot say that local clues are the only ones that help in understanding the meaning of the unknown word.

One of the clues that might help in the immediate context is grammatical which can be the word class of the unknown word, the grammatical structure of the whole sentence, or even just the relevant clause. Recognising the 'word class' of the unknown word in a sentence may become the first step in guessing the meaning of the unknown word in this sentence (Nuttall, 1982). Clarke and Nation (1980) from a pedagogical experience suggest that it would be better for a student to start with this

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step (i.e. to try to specify what part of speech the unknown word is). This agrees with van Parrern and Schouten-van Parrern (1981). In other words, one way of being able to use local clues in contextual guessing is to identify the word class of the target word. Readers may not find all word classes easily guessable. Na and Nation (1985) found that their L2 subjects were 42.8% successful in guessing verbs, 40.8% if the word is a noun, 29.2% and 11.3% if the word is an adverb or adjective, respectively.

On the other hand, global clues are the wider context clues that help in contextual guessing, which include every sentence or phrase in the text but not the unknown word's immediate context sentence. Haynes (1993), for example, defines global clues as 'integration of information throughout the passage' (p. 52). This probably includes the readersí content schemata if it is activated by the text's information while reading which might supply the readers with more clues. Content schemata, however, might be used with the local clues as well because readers' background knowledge could be activated any time when reading the passage even after reading a word or a phrase.

Global clues are usually used more by advanced students because of their capability in linking many ideas in different paragraphs of one text. Some studies show that global clues distinguished students with high proficiency level from low ones (see for example, Arden-Close, 1993; Chern, 1993; Haynes, 1993; Hosenfeld, 1977).

Clues might not always be present in the text, or only a few of them maybe available. Normal texts, however, have some clues, but whether the readers can find them or not depends on the learners themselves. It is true that clues might not be enough to recover the total meaning of the unknown word even for an expert guesser but this is the name of the game and what guessing is all about. It is not expected from readers to get the exact meaning of a word through guessing if we want guessing to work as smoothly and effectively as it should be (Nuttall, 1982); otherwise they might use the dictionary or ask someone.

Readers may try using morphological cues to guess an unknown word's meaning by attempting locating some clues within the word itself if they have the appropriate prior knowledge of L2 morphology to draw on. Some words in English are formed by adding a prefix (e.g. ***un***happy),

a suffix (e.g. happi***ness***) or both (e.g. ***un***happi***ness***) to the base or root. Readers could break the unknown word into its parts, a prefix and a root; a suffix and a root; or all the three parts to help in guessing its meaning.

Kruse (1979) considers recognising, what she calls 'words elements', (i.e. prefixes, roots and suffixes) a key to explore the meaning of the unknown word. For example, if readers already know the verb 'like' and may encounter the word 'dislike' which they do not know they might guess the meaning of the unknown word if they recognise the prefix 'dis'. Breaking the word into two parts 'dis' and 'like' might help the readers to guess the meaning of the unknown word if they know that the prefix 'dis' is added to a verb to form the opposite. Likewise, when they encounter adjectives that are formed from verbs or nouns or vice versa.

A similar clue that can be utilized by the readers is breaking down a compound word. Haynes (1993) reports that some of her subjects were successful in arriving at the correct meaning of the word 'campfire' by defining it into 'fire' and 'an outdoors place'. L2 learners need to know how to analyze a word in order to be able to extract any clues where there are different types of them. Nation (1990) shows two lists, the first one is about the useful Latin prefixes and the second one is about what he terms 'the fourteen words (keys to the meanings of over 14,000 words)'.

Not all affixation clues would help readers to use morphological guessing successfully in getting the meaning of the unknown word, but they might lead to incorrect or incomplete meaning, especially if the learner thinks he/she knows part of the word. If learners cannot recognize these clues efficiently (i.e. which part is the root and which part is the affix) they may fail to use them and that could result in 'wild' guesses. For example, Clarke and Nation (1980) found that some students guessed '*laterally*' as 'coming after or later'. Although, they were correct in recognising its part of speech as an adverb they were wrong in using their morphological guessing strategy to arrive at the correct meaning of the word. They probably thought of the word composed of two parts 'later + -ly'. Readers also might not be successful because of the problems of idiomatic derivations such as 'hospitality' which has no semantic relationship with a 'hospital'. Haynes (1993) found that some students guessed the idiomatic compound 'offspring' to mean 'the end of spring' which is not related semantically to spring.

Because of morphological guessing problems like 'offspring', Clarke and Nation (1980) suggest that analysing a word through affixation need not be used as the first strategy because it might lead to incorrect guessing. They argue it might be more beneficial for the learner to start with other clues in the sentence (i.e. contextual guessing) to help in guessing the meaning of the unknown word in its context as a first step to have a general idea about it. Hence, when he/she breaks it into its parts (i.e. affixes) to guess it morphologically, he/she will not be misled by the meanings of the word's components. This, of course, does not mean we ask the students to refrain from using morphological guessing in trying to locate clues within a word that may help in guessing a meaning of an unknown word, but readers may need to check their morphological guess with the context to make sure that they have arrived at the correct meaning. They also may use morphological guessing clues spontaneously with contextual guessing clues in the sentence or wider context.

Using the dictionary

One of the pioneering researchers in using the dictionary studies was Tomaszczyk (1979). He found that his subjects who were studying English as their L2 used their dictionaries to look up meaning and spelling, of which the former reflects use while reading but the latter while writing, more than syntactic information and etymology. This is consistent with Bejoint (1981), Snell-Hornby (1987), Summers (1988) and Battenburg (1991).

Although some lexicographers make some effort in providing instructions for the dictionary use, students may not benefit from them due to the fact that most L2 learners usually need training on dictionary use. It is then suggested that students might need teaching in dictionary use strategies as part of the curriculum. Not just the students need dictionary strategiesí instruction, but teachers too. Diab(1989), in his study , found that most of the teachers were not aware of reference strategies because teaching them was not part of the curriculum. Herbst and Stein (1987) found that French students were not able to use the dictionary effectively even after short time training. This made the researchers conclude that L2 students need more training in dictionary use which they claim is discour-

aged by English teachers in L2 classrooms. This is consistent with Tono's (1989) study on Japanese high school students who found that his subjects benefited from dictionary use strategies instruction and reported that their reading comprehension was much better when using dictionary.

There is a tendency among students to use their dictionaries when reading more than when doing other activities. This view is supported by Diab who found that 75% of the students used their dictionaries while reading more than when doing some activities in writing, speaking, listening and translating from L1 to L2 and from L2 to L1. This agrees with most of the results which suggest that students use their dictionaries, monolingual and bilingual (L2-L1), for decoding activities (reading and listening) more than encoding (writing and speaking) (Bejoint, 1981).

Skipping

Most L2 learners do not know that ignoring or skipping is a strategy that might be used for some unknown words. There is a lack of skipping studies in the reading literature as most of the studies focus on guessing. The present study tries to investigate the use of the skipping strategy in addition to guessing and appealing for assistance.

Skipping might not be a preferable strategy among most L2 learners in their normal reading. For example, Huckin and Bloch (1993) found that their subjects (3 intermediate Chinese students doing their Master in Business) did not try to ignore any unknown word out of the 44 unknown words although ignoring was not disallowed. Probably, the students did not know that even when they would ignore some unknown words, the meaning of the text would be understood. Learners may be encouraged to ignore adjectives and adverbs focusing on guessing nouns and verbs. Na and Nation (1985) found that students were more successful in understanding the text when guessing verbs and nouns only. This agrees with Ffrench (1983) about native speakers who usually pay more attention to content words (e.g. verbs and nouns). Readers may use guessing, dictionary, or skipping depending on how each or all strategies are available to them, which, of course, affects their choice.

Factors affecting the choice of a strategy

We talk about different WSS use and when they should be utilized, but we need to understand that there are some factors, which might lead a reader to choose a particular strategy over another one. Choosing a strategy might be influenced by some internal and/or external factors once a reader meets a lexical problem. Internal factors usually originate from or are caused by the person him/herself, which means these factors are idiosyncratic. Different readers might choose different strategies for the same task. External factors, on the other hand, are usually a result of outside causes which may influence different readers to choose similar strategies for the same task. We will not be able to discuss most of these factors because of the limited space, but we will focus on the most important ones (For more discussion about these factors see Alseweed, 2000).

Internal factors

Age might influence a reader to use a particular strategy. Adults usually are less risk-takers (Scholfield, 1987), the thing, which might influence their choices. That might be one reason why we find some adult L2 students seem uncertain about their guesses, so they refer to the dictionary more often (Hulstijn, 1993). The L2 uncertainty of the meaning is also noticed by Haynes (1993). Alseweed (1996) found that adult postgraduate students preferred to use the dictionary more than guessing and ignoring. All the subjects of this study are adults, so no age comparison in using the strategies will be investigated.

Language proficiency too can have an effect on strategy use. Alderson (1984) raises the question whether the problem of reading in the foreign language is a problem of language proficiency in the target language, or poor reading ability in the native language. In other words, is it a lack of vocabulary and syntactic knowledge of the L2 or inability of using reading strategies? Alderson, Bastien and Madrazo (1977) suggest that reading ability in the target language is affected by L2 proficiency rather than L1 reading ability. This is consistent with Chihara, Oller, Weaver and Chaveas-Oller (1977) and Cziko (1978).

According to Ulijn (1978) and Ulijn and Kempen (1976), poor reading in L2 is not caused by poor syntactic knowledge of L2 but due to lack of 'conceptual knowledge' (see also Uljin and Strother, 1990). What they mean by 'conceptual knowledge' is vocabulary knowledge and content schemata. Beck, Perfetti and Mckeown (1982) and Kameenui, Carnine and Freschi (1982) found that reading comprehension depends on more vocabulary knowledge (see also Laufer and Sim, 1985).

There are some studies which suggest that proficiency level plays a major role in using L2 reading strategies including WSS (see for example Carrell, 1991; Bossers, 1991; Lee and Schallert, 1997). The issue of proficiency level is considered by the present study to see its effect in using all WSS.

External factors

Purpose of reading is one of the important factors that might affect the readers' choice of a strategy. Although most of the time readers might decide by themselves what is important to them and what is not, there are cases where this might be imposed on them by the task or the teacher.

Royer *et al* (1984) after reviewing 15 studies of learning objectives from 1969 to 1977 concluded that students' reading purposes might be affected by learning objectives. Learning objectives are the course requirements from the subject that students are expected to learn, which are given before reading or concurrently with reading. Students were influenced by these learning objectives to focus on the parts that are referred to by the leaning objectives, which might lead them to use WSS more than other parts that were not referred to by the learning objectives.

Readers may guess, skip or use the dictionary depending on how they feel about a word. Hulstijn (1993) argues that it is not the case that students with more guessing abilities use the dictionary less than those with less guessing abilities but it is the importance of the word in the text which influences the learner. He shows in his study that students were more inclined to use the dictionary for relevant words whether they were easy to guess or not while irrelevant words were a target for guessing regardless of their easiness or difficulty. The question that might be

raised, then, whether the L2 students would be able to decide on which words are important or unimportant when reading on their own. Alexandri (1995) found that some of her university Greek subjects were not able to recognise important words (keywords) in order to guess their meanings or use the dictionary.

Similarly, learners may think of a word repetition in a text or any orthographic information (e.g. italic, boldfacing, and capitalisation) an indication of its importance. They would be more inclined to consult a dictionary, particularly after the second occurrence. In general, the use of the dictionary to look up an unknown word increases with the learner's feeling of its importance to his/her understanding of the text (Alseweed, 1996).

Density of unknown words in a text may make guessing inaccessible which might drive the reader to use the dictionary if it is available at the time of encountering the problem word. On the other hand, if readers do not have an easy access to a dictionary or asking someone, the most likely strategy they would use here is to return to the text and retry to work out the unknown word or probably skip.

Although all WSS can be used by the Saudi students in most reading activities, if they want/can, students feel that the dictionary is the primary resort, which they can turn to because of its easy accessibility. Alseweed (1996) found that dictionary use was the most used strategy among postgraduate Saudi students vis-a-vis guessing and skipping with a significant difference. However, there are some studies which disallow some strategies, so the students are left only with a particular one (see for example Huckin and Bloch, 1993) or make only one strategy easily accessible (see for example Hulstijn, 1993).

Previous studies
On free choice of strategies

Hosenfeld (1977) selected 40 students who had different native languages (French, Spanish and German), studying English as their L2. 20 students were ranked high proficient and 20 low proficient. This study is reviewed here to see the effect of proficiency level on choosing WSS. Because the students were in the high school level, they probably would be in the same proficiency level as the subjects of the present study who are at their first university level.

Hosenfeld used two research instruments, interviews and a think-aloud procedure, to make a comparison between the strategies used by successful and non-successful readers. Hosenfeld's findings show that successful readers used a variety of strategies. On the contrary, non-successful readers used dictionary as their first choice and seldom used skipping as they felt all words were important to the meaning. This shows that the students' levels of proficiency affected the choice of a strategy (see also Hosenfeld, 1984).

Although the findings of Hosenfeld are very valuable, they still have the limitation of generalizing because subjects had the chance to use cognates available from their L1 and L2 (English and French, German or Spanish) but some L2 learners may not be able to use this strategy (e.g. Arabic and Chinese speakers) because of the remote relatedness between their L1 and the English language.

Another study was carried out by Alseweed (1996) using a retrospective method, namely, a questionnaire to find out what word solving strategies are used by L2 learners. In comparison, Alseweed (2000) used three main methods, which are individual think aloud, pair think aloud, and interview. The participants of (1996) were different from his (2000) in their level of study, and so was the place where the study was conducted. Alseweed's (1996) subjects were 22 male Saudi, Arabic-speaking postgraduate students studying at the University of Essex, UK, whereas his (2000) study subjects were 19 male Saudi Arabic-speaking undergraduates in their final year studying at Saudi Arabia. This shows that the subjects of (1996) were more proficient in language and level of study than the subjects of (2000).

Both studies did not restrict the students to a particular strategy but gave them the freedom to report or use any strategy they normally used. It is thought that giving the students the free choice of any strategy of WSS is the closest method to the natural way in investigating the students' WSS use.

Unlike think aloud, the nature of questionnaires is anonymous and can elicit only related information to the study. On the other hand, they have the risk of reporting what the students think they do or want to do which can be avoided by think aloud technique. Moreover, to investigate the strategies used by the students while reading, questionnaires do not have

the same access to the readers' mental processing as think aloud does.

The findings of Alseweed (1996) and (2000) suggest that L2 students, in general, use guessing more than any other strategies. There is an indication of using global clues by advanced students more than intermediate.

Alseweed's (1996) findings demonstrate that the most popular reason to use look-up strategy by all students was looking-up a key word. There was, however a significant difference in using dictionary between advanced and intermediate students. Less proficient subjects reported that they used dictionary more which agrees with Hulstijn (1993) and Knight (1994). Skipping is reported to be used by advanced subjects more than intermediate with a significant difference. This supports the findings of Hosenfeld (1977) and Huckin and Bloch (1993) where less successful and less proficient readers rarely use skipping. Alseweed (2000) found that, while appealing for assistance was the first choice for intermediate students, it was guessing for the advanced.

On guessing

Arden-Close (1993) conducted a study on 39 male and female Omani students at their second university year studying chemistry, while the students of this study are at their first year studying English. One year is not a big difference, especially if we know that the latter students, in fact, have spent more than one year studying English beside other subjects. This might suggest, then, that Arden-Close's students, in general, had similar proficiency level as this of study.

Over a period of five months, Arden-Close had given his students different scientific texts where difficult words were underlined in text one, deleted in texts two and three, and nonsense words were inserted in texts four, five and six. Students were asked to guess and answer the questions they were given in the L2 explaining how they arrived at the meaning. Using the dictionary and skipping were both disallowed which means that they were not given the free choice of using all strategies they might use in their normal reading. The findings agree with Chern (1993); Haynes (1993) and Hosenfeld (1977) as 'good' readers used the local and global clues while the 'weak' ones used the local ones only.

Chern's (1993) study wanted to investigate the use of 20 Chinese learners' guessing strategies when they encountered unknown words in an English written text while reading. Subjects were studying in the USA (4 undergraduates and 16 graduates). After taking an English proficiency test, they were divided into high and low proficient levels (10 in each one). From their university level, we might claim that these subjects probably were more proficient than the subjects of the present study because some of them were graduates and also they were studying in the USA.

Subjects were asked to skim a text, summarise the general meaning in their L1 and then start guessing. They were instructed to think aloud when summarising and guessing by identifying each nonsense wordís part of speech, its meaning, and how they arrived at this meaning. This means that some aspects of the strategy use were decided for the students by the researcher which is not totally natural. Other strategies, skipping and appeal for assistance were disallowed. The results show that both groups used local clues, but high proficient students used global clues more often which agrees with Arden-Close (1993); Haynes, (1993) and Hosenfeld, (1977).

In a different study with a multi-national subjects, Haynes (1993) carried out a study on 63 adult subjects: 43 high proficient students and 20 low proficient. Subjects were all studying English in the USA with different L1 background (22 Spanish, 19 Japanese, 11 Arabic/French i.e. Tunisians, and 11 Arabic). The students were given two passages to read and retell them in L2 before they would start guessing the meanings of the nonsense words. Like Chern's study, dictionary and skipping were disallowed.

The results showed that all the students were more successful in guessing contextually locally constrained than globally constrained unknown words (*cf* Haastrup, 1985). Also the results of the Arabic group showed that using local and global clues came very close, which made Haynes suggest that they preferred using both kinds of clues. By contrast, Japanese learners preferred using local clues more than global with a significant difference.

It could be argued, however, that there were four reasons which affected the use of guessing among the different groups. Firstly, the groups' sizes are not the same; Arabic (6 low and 5 high) compared with the

Spanish group (18 low and 4 high). Secondly, the duration they spent studying English in the USA may have affected the result; the Arabic 6.4 months, the Spanish 4.1, the Japanese 2.7 and the Tunisian with Arabic and French background 1.6 months. Thirdly, the teaching methods taught in their home countries were different. Fourthly, they differed in their cultural backgrounds. It would be much better if these factors were taken into consideration when the study was conducted. In the present study, the students were in the same level of proficiency, their L1 is Arabic, and had the same cultural background and instruction.

On dictionaries

  Hulstijn (1993) wanted to find out look-up behaviour of unknown words of 82 high school Dutch students, while reading a text in L2 by using personal computers. Their proficiency level was intermediate.
   He found that relevant words were looked up more than irrelevant ones with a significant difference. Similarly, it was found that the guessability and non-guessability of the word does not make a difference among all students. They looked up the word whether it was easy to be guessed from available contextual clues or not, as long as they thought the word was relevant. He concludes that look-up increases with relevant words and lexical difficulty while it decreases with irrelevant words and more vocabulary knowledge. Hulstijn's findings suggest that those who used guessing and dictionary strategies were much better in understanding the text than those who used guessing only, which agrees with Knight (1984) and Summers (1988). (For more on dictionary use, see Bejoint, 1981; Snell-Hornby, 1987; Summers, 1988; and Battenburg, 1991).

Analysis

   Analysis focuses on means of the different strategies used by all participants. This section is divided into four parts; overall strategies, guessing, dictionary use, and skipping.

Overall strategies

As it is clear from Table 1, all students showed their preference in using all WSS which is consistent with H1 and agrees with Alseweed (1996, 2000). However, we can find some variations in their use of the different strategies. For example, Table 1 shows that using morphological guessing with a mean of 1.8 is not as much as contextual guessing mean, which is 2.5. The higher frequency of using contextual guessing compared with morphological guessing is consistent with Alseweed (1996) and Chern (1993) which is probably a result of the students' low proficiency level, as they would not have the ability to use morphological guessing because of the lack of L2 knowledge, as discussed above. Looking at Table 1, we see that the most used strategy was dictionary use with a mean of 2.9, which agrees with hypothesis 2b and Alseweed (2000), while it is not consistent with Alseweed (1996). The reason is probably the participants in Alseweed (1996) were more proficient than the present study's participants and Alseweed (2000) since the students of (1996) study were postgraduate, while the students of the (2000) study were undergraduate. Skipping, as clear from Table 1, is the least strategy used by the participants with a mean of 1.1, which supports hypothesis 2c and agrees with Hosenfeld (1977), Huckin and Bloch (1993), and Alseweed (1996, 2000).

Table 1: Means of overall use of strategies by all participants

Strategies	Mean	S. D.
To understand the meaning of unknown word, I work it out	2.5	0.9
To understand the meaning of unknown word, I look it up	2.9	0.9
To understand the meaning of unknown word, Ignore it	1.1	1.0
To understand the meaning of unknown word, I break it into parts	1.8	1.2
To understand the meaning of unknown word, I try to know its parts of speech	2.4	1.2
To understand the meaning of unknown word, I ask about its meaning	2.3	1.1

Always= 4, Frequently= 3, Sometimes= 2, Seldom= 1, Never= 0

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Guessing strategies

In order to find any clue to help in identifying the meaning of the unfamiliar word, students preferred reading the words before and after the unknown word of the same sentence with a mean of 2.7, as Table 2 shows. Since the clues the students were looking for were in the same sentence of the unknown word, then this is considered, as discussed earlier, a contextual guessing strategy using local clues. On the other hand, reading sentences before and after the sentence of the unknown word is a contextual guessing strategy using global clues, which is preferred by the students with a mean of 2.3. Choosing to read on with a mean of 2.8 when encountering an unfamiliar word is another contextual guessing strategy using global clues. Reading on can include sentences before and after and other words in the text but not in the sentence of the unknown word. Deciding to use global clues with almost the same mean of local clues refutes H2a since it was expected that the students would use local clues more because of their low proficiency level. However, it is consistent with Alseweed (1996) and Chern (1993) that most L2 students regardless of their proficiency level use both types of clues with no significance difference. It also agrees with Haynes (1993) in that using local and global clues by the students with Arabic background came very close.

Table 2: Means of guessing strategies used by all participants

Strategies	Mean	S.D
To know the meaning of unknown word, I reread words before & after	2.7	1.1
To know the meaning of unknown word, I reread sentences before & after	2.3	1.1
To know the meaning of unknown word, I reread whole paragraph	1.9	1.1
To know the meaning of unknown word, I reread whole text	1.4	1.2
To know the meaning of unknown word, I work out it immediately	2.3	1.1
To know the meaning of unknown word, I read on	2.8	0.9

Always= 4, Frequently= 3, Sometimes= 2, Seldom= 1, Never= 0

Dictionary

Means in Table 3 suggest that the students have preference for using the dictionary for all different types of purposes which agrees with hypothesis H1c and is consistent with most studies mentioned above. Nevertheless, looking up the unknown word to know its pronunciation, grammatical information, and to see an example illustrating its meaning, in addition to the students' specialized area words are not among the popular causes of using the dictionary compared with looking up the relevant meaning of the unknown word and key words. Students seem to prefer to use their dictionaries for the last two purposes (i.e. relevant meaning and key word) more than anything else with mean 2.7. This agrees with Hulsijn (1993) and Alexandri (1995). Looking up every unknown word with a high mean (2.7) which is similar to relevant meaning and key words explains why students tend to use skipping very seldom. Having a high mean in using the dictionary (2.7) similar to using contextual guessing refutes hypothesis H2b, as it was expected that the students would use appealing for assistance more than other strategies.

This high mean of using the dictionary for all purposes probably suggests that the students in the low proficiency level do not want to miss any new word, as they are still unable to decide whether the word is important or not. This might explain why the students seem to refer to the dictionary for all types of words more often.

Table 3: Means of dictionary use purposes by all participants

Strategies	Mean	S. D.
I use the dictionary for relevant meaning	2.7	1.1
I use the dictionary for other meanings	2.4	1.1
I use the dictionary to make sure	2.6	1.2
I use the dictionary to know pronunciation	2.1	1.4
I use the dictionary to know grammatical info	1.6	1.0
I use the dictionary to see example	2.1	1.2
I use the dictionary for every word	2.7	1.1
I use the dictionary for specialized words	2.1	0.9
I use the dictionary for words repeated	2.4	1.3
I use the dictionary for key words	2.7	1.2

Always= 4, Frequently= 3, Sometimes= 2, Seldom= 1, Never= 0

Skipping

Table 4 shows that the students are willing to use ignoring strategies, which agrees with hypothesis H1d. However, means for all types of ignoring reasons are low in comparison with other strategies (i.e. guessing and dictionary), which supports hypothesis H2c. Showing less preference for using skipping is consistent with Alseweed (1996) but not with Alexandri (1995) and Alseweed (2000). Perhaps, the reason for these different results is that both Alseweed (1996) and the present study used the same data gathering method i.e. a questionnaire, while Alseweed (2000) used 'think aloud' and Alexandri 'self report after reading'. Questionnaires probably encourage students to give more answers of what they are/ want, while other methods only reflect what the students do at the moment of doing the activity.

Table 4: Skipping strategies used by all participants

Strategies	Mean	S. D.
I ignore when I can understand the sentence	2.1	1.1
I ignore when I can understand partial meaning of the sentence	2.2	1.0
I ignore when I feel it is not a key word	2.0	1.2
I ignore when I want to read with no interruption	2.0	1.0

Always= 4, Frequently= 3, Sometimes= 2, Seldom= 1, Never= 0

Conclusion

All participants showed their preference in using all types of WSS. Students seem to like to use contextual guessing more than morphological guessing because of their low EFL proficiency level, which affects their knowledge of the English morphology. Using the dictionary is the most popular strategy among students, especially when it comes to looking up the unknown word's meaning and key words compared with other information such as grammatical and pronunciation and examples. By contrast, skipping is the least used strategy, which is not surprising when we know the high mean of looking up every unknown word as an indication of the students' preference not to skip any new word..

Implications for teachers of EFL students

Probably, there are some language teachers who feel that there is no need for WSS because they can teach their students most of the vocabulary they think the students would encounter in their course books or through pre-teaching of a reading passage just before the reading task. Nevertheless, we feel that L2 students usually would like to increase their vocabulary knowledge and understanding, particularly as they go to tertiary educational levels. Therefore, we think that teachers might like to teach their students WSS indirectly by encouraging successful readers to share their good strategies with the poor readers.

Although I have not come across a study that shows how the English

language teachers feel about teaching WSS, I would think as an English language teacher myself, and from the students' preferences that teaching these strategies is essential to the students. Students would probably improve in their reading if WSS use is taught. I think it is probably worthwhile to spend the time with the students on learning WSS than to try to teach them infrequent words.

Acknowledgements

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