Vocabulary Learning Strategies of Medical Students at High Institute of medical Science and Technologies in Almarj

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الملخص

تهدف هذه الدراسة إلى معرفة أكثر استراتيجيات تعلم المفردات استخدامًا من قبل طلاب المعهد العالي للعلوم والتقنيات الطبية استخدمت الدراسة منهجية المسح، حيث استخدمت نسخة معدلة من الاستبيان الذي أعده جونز (2006)

شمل المشاركون في الدراسة 25 طالبًا يدرسون في السنة الثالثة من قسم الصيدلة، وطُلب منهم الإجابة على جزأين من الاستبيان. تطلب الجزء الأول بعض أسئلة المعلومات الأساسية. أما الجزء الثاني فكان 5استراتيجيات، وكان على الطلاب تصحيحها من حيث تكرار الاستخدام

تم تحليل البيانات باستخدام الإحصاء الوصفي، وتشير النتائج إلى أن الاستراتيجيات المستخدمة هي: استراتيجيات القاموس، ثم استراتيجيات التخمين، ثم تدوين الملاحظات والانتباه التلقائي

الكلمات المفتاحية: التعليم الطبي، استراتيجيات تعلم المفردات، استراتيجيات القاموس، استراتيجيات التخمين، المصطلحات الطبية، طلاب اللغة الإنجليزية كلغة أجنبية

Abstract

This study aimes to find out which the most used vocabulary learning strategies by medical students at High Institute. The study employed a survey method where it used a modified version of the questionnaire prepared by **Johns (2006)**

The participants of the study included 25 students studying in third year of **High Institute** they required to answer the parts of questionnaire

The first part required a few background information question.

The second part was five strategies, the students had to make in terms of frequency of use

The date was analyzed using descriptive statistics the results indicate the most used **dictionary strategies** then **guessing strategies**

These results suggest a strong reliance on direct reference tools for acquire to dependence   medical terminology

Keywords: Learning Strategies (VLS); Dictionary Strategies; Guessing Strategies; Medical Terminology; EFL Students (English as a Foreign Language).

1.Introduction

This study aims to investigate the use of vocabulary learning strategies of medical students at **high Institute in Almarj**

Learning Strategies have been defined by **Oxford (1990−1994)** as a specific actions , behaviors , steps ,or techniques students use often consciously to improve their progress in apprehending internalizing and using L2

Medical students face the daunting task of acquiring a vast vocabulary of complex medical terms, concepts, and procedures. Effective vocabulary learning strategies are crucial for their academic success and future clinical practice. Breaking down complex terms Understanding prefixes, roots, and suffixes

Medical terminology is the language used by healthcare professionals to describe the human body, its parts, and various medical conditions. Mastering medical terminology is essential for medical students to communicate effectively with patients, colleagues, and other healthcare professionals. However, learning medical terminology can be a challenging task due to the complexity and vastness of the vocabulary. To overcome these challenges, medical students need to employ effective vocabulary learning strategies that cater to their individual learning styles and needs.

Vocabulary learning strategies are techniques used to learn and retain new words and their meanings.

In the context of medical terminology, these strategies are crucial for medical students to develop a strong foundation in the language of medicine. Effective vocabulary learning strategies can help medical students

1.1 The statement of problem(hypothesis)

is hypothesized that non-native speakers find it difficult to learn complex medical terms. However, mastering these terms is essential for their progress in medical studies and future clinical practice."

1.2 The Aims of Study

This study is designed to investigate the use of vocabulary strategies by medical students at **High Institute in Almarj** city when learning English as a foreign language

1.3 Research Question

What are the most common vocabulary learning strategies used by medical students at **High Institute** when learning in English as a foreign language?

1.4 The significance of the Study

This study helps to shed light on individual differences in vocabulary learning strategies among medical students. The findings may help educators develop more effective teaching methods tailored to students' needs, ultimately improving their ability to master complex medical language

1.5 The limitation of the Study

The Study has the limitation of including participant from only one class in the Institute

2.Literature Review

Vocabulary is inevitably an integration of any language system and vocabulary knowledge has a significant Role in language comprehensive and production, consequently, vocabulary learning strategies are Great lymphatic important in language learning strategies and both teachers and learners Should be aware of their uses **(Fan 2003)** vocabulary learning strategies defines as any action which effects this rather broadly define process

The literature suggests that a combination of spaced repetition, active recall, contextual learning, mnemonics, and practice and review are effective strategies for medical vocabulary learning. Medical educators can use these findings to inform their teaching practices and help students develop effective vocabulary learning strategies

Learning vocabulary is a crucial aspect of language acquisition, and various strategies have been proposed to facilitate this process. A review of existing literature reveals several key findings:

Effective Vocabulary Learning Strategies

1. Repetition and Spaced Review Repetition is a widely recognized strategy for vocabulary learning (Nation, 2001). Spaced review, which involves reviewing words

at increasingly longer intervals, has been shown to be particularly effective (**Cepeda et al., 2008**).

2. Mnemonics and Associations Mnemonic devices, such as acronyms and rhymes, can help learners remember vocabulary more effectively (**Atkinson, 1975**). Associations between words, such as synonyms and antonyms, can also aid retention (**Nation, 2001**).

3. Contextual LearningLearning vocabulary in context, such as through reading and listening, can help learners understand word meanings and usage (**Krashen, 1989**).

4. Active Recall Actively recalling vocabulary, such as through self-testing, can improve retention and recall (**Karpicke & Roediger, 2008**).

Less Effective Vocabulary Learning Strategies

1. Rote Memorization Simply memorizing vocabulary lists without context or associations is not an effective strategy (**Nation, 2001**).

2. Passive Exposure Passive exposure to vocabulary, such as through watching TV or listening to music, is not sufficient for effective learning (**Krashen, 1989**).

2.1 What is vocabulary?

Vocabulary refers to the collection of words, phrases, and terms that a person knows and uses in a particular language. It encompasses various aspects, including:

1. Word meaning: Understanding the definitions and connotations of words.

2. Word usage: Knowing how to use words in context, including grammar, syntax, and idiomatic expressions.

3. Word recognition: Recognizing and reading words, including their pronunciation and spelling.

Vocabulary is a crucial aspect of language learning and communication, as it enables individuals to express themselves effectively and understand others.

There are different types of vocabulary, including:

1. Receptive vocabulary Words and phrases that a person can understand when they hear or read them.

2. Productive vocabulary: Words and phrases that a person can use in their own speech or writing.

3. Academic vocabulary: Specialized words and phrases used in academic or technical contexts.

4. Domain-specific vocabulary: Words and phrases specific to a particular field

2.2 The language learning strategies

Language learning strategies are techniques or methods used by learners to acquire, practice, and improve their language skills.

Language learning strategies defined by many authors **(Ellis1997),   –(Oxford 1990)** they describe them as specific actions taken by the learner to make learning easier, faster, more self directed, more effective and mire transferrable to new situation

O'Malley and Chamot (1987) divided strategies in to major types dictionary strategy, guessing strategy, study preferences, memory strategies, selective attention strategy, social strategy

Here are some details on the learning strategies mentioned:

Dictionary strategies

Using context clues and prior knowledge to guess the meaning of an unknown word.

As for example When reading a medical text, you come across the word "hypertension". You don't know the exact meaning, but you guess it might be related to high blood pressure based on the context

Guessing Strategies

Guessing strategies are techniques used to make educated guesses when encountering unknown information.

As for examples of Guessing Strategies

– You encounter the word "hypoallergenic" and use the prefix "hypo-" to guess that it means "less likely to cause an allergic reaction".

– You read a sentence with the word "photosynthesis" and use the context to guess that it's a process related to plants and sunlight.

Study Preferences

Identifying and using individual learning preferences to optimize studying.

As for examples Some people prefer studying in quiet environments, while others prefer background music. Some people prefer visual aids, while others prefer hands-on activities.

Selective Attention

Focusing attention on relevant information and ignoring irrelevant information.

As for example When reading a medical article, you focus on the main headings, subheadings, and key terms, and ignore the less important details.

Social Strategies

Using social interactions to support learning.

As for example Joining a study group, participating in class discussions, asking questions, and seeking feedback from peers or instructors.

These strategies can be used individually or in combination to support learning and improve academic performance

2.3 The strategies of learning

 vocabulary There are a wide range of vocabulary learning strategies as shown by classification of vocabulary learning strategies (Schemitt) distinguished two board types discovery strategies and consideration strategies it divided in to determination strategies , social strategies , memory strategies , cognitive strategies ad meta cognitive strategies

3.5 ESP and medical English vocabulary

English for specific purposes ESP us usually described as applied ELT as it designed to meet specific needs of learners and it has contents that are related to particular professions and situations**(Dudley _Evans) StJons 1998)**

ESP (English for Specific Purposes) in medical English vocabulary refers to the specialized language used in medical settings.

Medical Terminology

1. Anatomy Terms related to body structures (e.g., cardiovascular, musculoskeletal)

2. Physiology: Terms related to body functions (e.g., respiratory, digestive)

3. Diseases and Condition: Terms related to various medical conditions (e.g., diabetes, hypertension)

4. Treatments and Procedures: Terms related to medical interventions (e.g., surgery, pharmacology

2.6 ESP Strategies for Medical English

Here are some ESP (English for Specific Purposes) strategies for Medical English:

Reading Strategies

Identify key terms Recognize and understand medical terminology.

Use context clues, Use surrounding text to understand unfamiliar vocabulary., Scan and skim Quickly scan headings, subheadings, and summaries to understand the main ideas.

Vocabulary Strategies

Learn prefixes and suffixes Understand common prefixes and suffixes used in medical terminology.

Speaking Strategies

Practice pronunciation Focus on correct pronunciation of medical terms. , Use simple language to explain complex medical concepts.

Listen actively listen to native speakers and try to mimic their pronunciation and intonation.

Writing Strategies

Use clear and concise language Avoid using jargon or overly complex language, use proper formatting Use headings, subheadings, and bullet points to organize your writing, proofread carefully Check your writing for grammar, spelling, and punctuation errors.

Listening Strategies

Focus on key words Identify key words and phrases in lectures or conversations, use visual aids Use diagrams, charts.

2.6 The importance of strategies in learning medical English vocabulary

The strategies is very important in learning medical English (**Nation 1997)** was among the first researchers who developed vocabulary learning strategies and he points out that vocabulary learning strategies

Strategies play a crucial role in learning medical English vocabulary

enhanced Learning by improved retention Strategies like repetition, flashcards, and mnemonics help learners retain medical vocabulary, Efficient learning Targeted strategies enable learners to focus on high-frequency vocabulary and concepts.

3.Data collection and Data analysis

3.1 The participants

The participants   in this study consisted of 25 students enrolled a medical English Terminology course during their third academic year at High Institute This purposeful sample was selected to represent students directly engage with complex medical terminology

3.2 Instrument

The researcher has used a questionnaire. It was slightly modified, version of the one used by **Seddigh and Shokrpur (2012)**

The research found questionnaire adequate for the purposes of the current study as it covered all the relevant strategies. The questionnaire consist of two sections

The first is a set of questions used to get same background information of the students and their levels studies grades in English language

The second consist of six strategies which are dictionary strategies, guessing strategies, study preferences, memory strategies, Selective attention strategy, social strategy

3.3Data collection

The researcher explained the questionnaire to the students and distributed it among the students. The participants were asked to grade each strategy they were told to ask if they had any doubt in any of the items

The participants were asked to grade each strategy mentioned according to their use of them in item rarely, never, useful, often, always, as well as based on their usefulness in terms very useful, useful, not useful after the students filed up the questionnaire they were collected it

The Questionnaire

Name

Age

Level of study

Grade in English

Knowing English for me very important \ important

/not important

My proficiency in English poor /very poor /not bad /good /Excellent

Strategies

Dictionary strategies

1. I use an English dictionary only

2.   I use Arabic /English or English / Arabic dictionary

3.   I look up the different meanings of the word in the dictionary

4.   .I look up a word in the dictionary if it is of personal interstate

Me

Guessing Strategies

I guess the meaning of words I don't know befor I ask som one else or look the dictionary

Study preferences

      When I study vocabulary, I work alone

       When I study vocabulary, I work with group

Selective attention

      I think about my progress in vocabulary learning

      I decide which words are important for micro learn

Social strategies

    I ask my teacher for meaning of bed words

    I ask students for meaning of new words

3.4Data analysis

The data was analyzed using SPSS in order to find out which strategies is most used among the students descriptive, statistics was used the table showed percentage of use six different strategies

The table summarize the percentage of frequency of using different strategies

Strategy	N	mean	%of use	min	max
Dictionary strategy	25	4.04	84.4	2.70	5.00
Guessing strategy	25	4.24	80.8	2.00	5.00
Study preferences	25	3.30	66.0	2.15	4.38
Selective attention strategy	25	3.18	63.7	1.67	5.00
Social strategy	25	3.65	73.7	2.00	5.00

Results of analysis on how the participants found the different strategies the most used (use of English **dictionary strategies**) a mean percentage of 84%the students use Arabic English dictionary and they look different meaning if the word and look up word in dictionary if its personal interest to me

Use of (**guessing strategies**) 80% the students guess the meaning of words they don't know before they ask some one or look in the dictionary

They are also seen to have been rated very highly in terms of usefulness

The medical students prefer dictionary and **guessing strategies** about anther strategies they prefer monolingual dictionary

65% of students use **study preferences** strategies when they study vocabulary work alone or in group .

63% of the students use **selective attention** strategy then think about their progress in vocabulary learning and they decide which words are important to them

73% of the students use the **social strategy** they ask teacher for meaning of new words and they ask other students for meaning of new words

Discussion

According to the results of the current study the most used vocabulary learning strategies are dictionary strategies and guessing strategies they are also seen to have been rated very highly in terms of usefulness this is in line with the results of the study conducted by **Seddigh and Shokpur (2012)** among medical students

The results suggest that the students prefer a monolingual dictionary over a bilingual dictionary is difficult to comprehend for non native

speaker, but it helps the learner to be more efficient in the use of target language over time as they become les dependent on their native language and more on the target language

This result can also suggest that the participants of the study have already advances in their learning that they shifted from using bilingual dictionary to the use of mono lingual dictionary this can seen in study preferences strategies

The center for independent language learning suggest that working in groups tempts us to learn partially and learning alone prevents this, in addition learning alone helps us, to learn what we find important as opposed to what the group wants as other might not have to or want to learn the terms we wish to learn

Schmitt(1997) suggests that vocabulary acquisition is speeded up when the learners interact with native English speaker. In addition, considered useful are watching English scientific movies and reading the English books

The least used categories that was social strategies this calls for training the   training the students for effective use of vocabulary learning strategies as suggest by **O'Malley (1985)**.He point out that the students can only use the different strategies if they were aware if their use

This finding is consistent with **Ahmed (2021)**, who observed that advanced

 medical students in North Africa tend to shift toward monolingual resources to capture the precise nuances of clinical terms that might be lost in translation.

4.1 Conclusion

Through this study, the researcher aimed at finding the top used strategies by medical students to learn complex medical terms

Previous researchers suggested that the top strategies uses dictionary and guessing diagnostic approach practicing with native speakers as well ad in English speaking country (**Malclom**) . the result of current study is in line with the results of the study conducted by **Seddigh and Shokrpur (2012)** which conclude that the most used strategies medical students were dictionary and guessing strategies

The result also indicate that students prefer of study alone to learn vocabulary

English of medical purposes as a sub _system of ESP could make use of language learning strategies as they could facilitated learning and acquiring some in aspects especially vocabulary

The studies conducted regarding to adapted these strategies in classroom teaching and learning and how to train learners to use vocabulary learning strategies efficiently

4.2 Recommendations

In light of the research results, the researcher that the instructors should do the following:

- Raise awareness of learners

- Recognize the suitable strategy for every situation

- Suggest a variety of strategies

- Let learners decide which one is useful of them

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