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MULTIMEDIA RELATED VOCABULARY LEARNING STRATEGIES AMONG ENGLISH AS FOREIGN LANGUAGE ALGERIAN STUDENTS

Abstract

The focus in the present paper is on the evolution of students' behaviour in terms of Vocabulary Learning Strategies use from Year 1 to Year 3, with special focus on the type of strategies that might be conductive to larger vocabulary size. The study is undertaken with 184 EFL undergraduate students at the University of Algiers 2, and the data collection instruments comprise: the Vocabulary Size Test (VST) (Nation 2007), VLS Questionnaire (Schmitt 1997) and a general vocabulary learning open questionnaire. Findings reveal that the whole population has similar preferences for Determination and Metacognitive Strategies, while Social Strategies are the least frequently used. Besides, analysis of correlations between variables does not demonstrate any significant impact of VLS use on vocabulary size growth, except for the low-intermediate freshers for whom Metacognitive Strategies involving the use of the Internet to search for information or to communicate seem to be significantly correlated to their vocabulary size. These findings have interesting implications for the classroom as they stress the importance of integrating explicit vocabulary instruction as well as strategy training to reinforce the students' vocabulary knowledge and build up stronger learners' autonomy, and it shows the potential support of multimedia related strategies in developing this knowledge.

Keywords: Multimedia, VLS, vocabulary learning strategies, vocabulary size.

1. Introduction

It is commonly agreed that the number of words that a child learns in his mother tongue is a clear indicator of his global linguistic ability (Lee 2011), thus the influence of vocabulary size on the general literacy achievement is also true in the context of FL/SL learning. The fact is that the vocabulary is a dynamic, changing, unstable and limitless component of language because words are in continuous movement and new words are constantly added to dictionaries as a reflection of the evolution of humans and changes in society and the world in general. In this perspective, it would be unrealistic to expect the very large number of words in a FL/SL to be taught within the classroom. Following the shift from teacher-oriented EFL instruction to a learner-focused approach, the priority of teaching has aimed at assisting learners in becoming more independent in their language learning instead of relying on the teacher to provide them with all they need effortlessly. With respect to vocabulary learning, this shift has led to the emergence of many prominent studies in the field of language learning strategies in general, and vocabulary learning strategies (VLS) in particular, to encourage EFL learners to be dynamic and autonomous in developing their lexical knowledge (Oxford, 1990; O'Malley & Chamot, 1990; Cohen, 1998; Schmitt, 2000).

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Different aspects underlying VLS use have been explored to identify what can impact on or assist the efficient use of these learning tools, or what strategies are more conducive to success in overall EFL learning. There have been some studies that investigated the evolution of strategies use and preferences over time, showing that the proficiency levels and EFL experience of learners have an impact on their expectations, choices and results of strategy use (Schmitt, 1997; Wenden, 1998). However, the gradual change or progression in the use of these strategies by learners at different levels of their proficiency in the TL has not been widely researched. Thus, this is an area of research that the present study attempts to contribute to by investigating the evolution of VLSs use by Algerian university learners learning English as a FL from the first to the third year of the undergraduate degree course. Learners' behaviour in terms of VLSs use is also superposed with other aspects of language learning such as their vocabulary size. Besides, given the well-known attraction that young adults have for various multimedia devices, it can be interesting to investigate the extent to which this attraction is reflected in the way these young EFL students learn vocabulary.

2. Review of Literature

2.1. Learners' Autonomy and VLS

Considering the fact that when learning a foreign language the vocabulary component is possibly the most demanding and challenging part (Meara, 1995; Schmitt, 2000; Nation, 2001; Milton, 2009), it is important that the learner is equipped with the necessary lexical competence in order to become proficient in that language. However, foreign language pedagogy has been heavily teacher-oriented for many decades, the shift towards learner-centred instruction has encouraged for more learner autonomy and self-management by the learners themselves in all aspects of the TL, including vocabulary teaching. This shift in teaching ideology has increased the interest in language learning strategies as an area that could explore and solve the vocabulary learning difficulties experienced by many FL/SL learners (Schmitt 2000).

During the past four decades, the flourishing interest given to the area of language learning strategies (Rubin, 1987; Oxford, 1990; O'Malley & Chamot, 1990; Cohen, 1998) has led to various studies classifying the strategies involved in learning specific aspects of FL, including vocabulary learning strategies (VLSs). While some studies investigated the extent to which individual VLSs were efficient (Hulstijn, 1997; Fraser, 1999; Chan, 2012), some others explored the effectiveness of combined use of VLSs by FL/SL learners (Gu & Johnson, 1996; Schmitt, 1997; Fan, 2003). The increasing interest in the field of LLSs in general and VLSs in particular led to many studies offering a number of classifications of these VLSs, each of which had documented the process of vocabulary acquisition (Cohen, 1990; Oxford, 1990; Sanaoui, 1995; Gu & Johnson, 1996; Schmitt, 1997; Nation, 2001).

One of the most comprehensive classifications that has become a well-recognised reference by a large number of researchers is the one developed by Schmitt (1997) which was in its turn inspired by research undertaken by Oxford (1990) and Nation (1990); the thing that has made it popular among researchers in the field. Schmitt (1997) proposed a well-defined taxonomy in which a clear distinction was made between discovery strategies, i.e.; the ones used to discover the meaning of unknown words encountered by the learner, and consolidation strategies, i.e.; the different techniques used to reinforce and remember vocabulary items (Nation 1990). Moreover, he also integrated within this taxonomy the categories suggested by Oxford (1990), namely cognitive, metacognitive, social and memory. He then added the category of determination strategies as a subclass of discovery strategies and which refer to what learners do to discover the meaning of a new word without the help

of another person. On the basis of his findings in a study with Japanese EFL learners and feedback received from teachers, he developed a taxonomy with 58 strategies categorized under the two headings of discovery strategies and consolidation strategies. The VLSs taxonomy developed by Schmitt (1997) has contributed greatly in developing knowledge about the vocabulary learning strategies used by learners of a FL/SL and has provided a comprehensive framework in which various aspects of vocabulary learning are taken into account. The vocabulary strategies questionnaire derived from his taxonomy had largely been used by researchers investigating the field of VLS use in various FL/SL contexts.

2.2. VLS Use Among EFL Learners

Research investigating the relationship between strategy use and language proficiency has demonstrated that EFL/ESL learners at different proficiency levels have different beliefs and behaviours in terms of strategies which are influenced by their level of knowledge of the TL (Wenden 1998). The more proficient the learners are, the more successful they are in using a variety of cognitively complex strategies, while learners who are less knowledgeable or successful in the TL tend to use a limited number of strategies most of which are usually less demanding cognitively. Thus, the general belief is that the way, frequency and adequacy of strategies use among learners can easily allow for a clear distinction between successful and less successful EFL/ESL learners. (Gu & Johnson, 1996; Schmitt, 1997; Fan, 2003; Tseng & Schmitt, 2008).

One of the major studies documenting this distinction is the one undertaken by Schmitt (1997) with different participants whose proficiency levels ranged from high school, to university students or adult learners in Japan. Schmitt's survey undertaken with 600 Japanese EFL students provided valuable insights about the use, effectiveness, as well as the usefulness of the different VLSs among participants of various ages and educational levels. The participants were asked through a questionnaire to indicate how frequently they used specific strategies and to evaluate their effectiveness from their perspective. On the one hand, results of this survey showed that in order to discover the meaning of unknown words, the most frequently used strategies are the ones related to use of bilingual dictionaries, guessing from context, as well as asking classmates for meaning. On the other hand, to consolidate the meaning of words, the most popular strategies were verbal and written repetition, note-taking and word lists, studying the written or the aural form of the word, as well as pronouncing the new words aloud. Besides, the strategies that were reported to be the least frequently used are the ones related to relating meaning to L1 cognate, using semantic maps, using flashcards, or asking teacher for explanation. Results showed that simple strategies such as word lists, flashcards and repetition are commonly used by learners with a relatively low proficiency, while more advanced learners are able to be more autonomous by using strategies like guessing from context, analysis of word form, or using personal experience to understand vocabulary items, processes that are much more cognitively demanding.

There were many efforts in the literature to identify the individual vocabulary strategies that are likely to lead to efficient vocabulary comprehension and learning. However, the greatly positive effect of using a variety of strategies at the same time instead of individual ones has been largely advocated by researchers in the field of vocabulary learning (Ahmed, 1989; Sanaoui, 1995; Gu & Johnson, 1996; Schmitt, 1997; Fan, 2003; Tseng & Schmitt, 2008). Besides, Schmitt (1997) as well as other researchers such as Ahmed (1989) and Oxford (1989) indicated that age and proficiency levels of the learners can have an impact on the choice of vocabulary learning strategies. In fact, young and low proficiency learners are believed to count on mechanical repetition strategies that are not very cognitively demanding.

As the learners mature and become more proficient in the TL, they start using analytical strategies like analysis of part of speech and guessing from contextual clues (Schmitt 1997).

When learning a target language, learning the vocabulary of this language is one of the things that the learner can undertake individually and independently from the teacher. More specifically, an EFL learner needs a very large amount of vocabulary knowledge to be able to operate efficiently and correctly in the TL, however, such large amount cannot be taught by the teacher in the classroom. Thus, EFL learners are expected to take responsibility of much of their vocabulary learning, which implies the use of conscious strategies. Moreover, the fact that vocabulary is an element of language that constantly evolves and expends, makes the use of strategies very important for the learner in order to cope with this unique changing nature of vocabulary. The strategies that the learner might make use of outside the classroom, i.e., without the teacher's help, are considered by Nation (1990) to be the most crucial in the vocabulary learning process. Identifying the strategies that learners use to expand their vocabulary knowledge is therefore a highly important element that allows a better understanding of the process through which learners acquire the TL in general and the vocabulary component in particular (Sanaoui 1995).

3. Methodology

3.1. Context

This study constitutes one aspect of the researcher's PhD research attempting to investigate the growth pattern of vocabulary size and VLS use, as well as the correlation between the two variables, among a sample of EFL students enrolled at the University of Algiers 2, from the time they join the undergraduate course until they are about to graduate (Talbi-Hassani 2019). In the present paper however, the focus is on the analysis of the students' behaviours in terms of VLS use from one proficiency level to the other, on the students' preferences among the different categories of VLS, as well as on the types of strategies that seem to have a bigger impact on their overall vocabulary size growth.

Among the aspects of language that seem to hinder the learning process of a great number of students, major lexical difficulties and gaps can be noted and they usually prevent them from understanding the classes properly and therefore from achieving successfully at examinations. The four language skills (Listening/Speaking, Reading/Writing) require dense and diversified vocabulary that few students master; this is an observation that probably no language teacher has failed to notice. While this lack of vocabulary mastery can be understandable at the beginning of the academic degree course in Year 1, it can quickly become a hurdle as the students move to upper classes (Year 2 & 3) in which they are required to understand, retain and produce correct and rich language with appropriate vocabulary, more intensely and in all types of courses. These difficulties seem also largely related to their lack of autonomy in language learning, and therefore insufficient or inappropriate use of vocabulary learning strategies as most students would rely entirely on the teacher to teach them all the words needed at degree level, which is of course an impossible mission.

Within the LMD curriculum, there is no direct vocabulary instruction, instead this element is indirectly integrated within the courses of reading/writing and listening/speaking in Year 1 and Year 2 courses. In these courses, students are presented to vocabulary written or spoken content to encourage lexical comprehension in context. Even though these skills courses take into consideration the vocabulary component of language, there is no specific strategy training within the curriculum that teaches students ways to cope for insufficient vocabulary knowledge and encourage autonomous lexical learning. Given the fact that the

undergraduate students are young adults who are probably quite influenced by multimedia in general and the Internet in particular, it is worth investigating whether this expected attraction to these devices has any impact on the way they learn vocabulary outside the classroom and the VLS they might use.

3.2. Participants

This study was undertaken with an overall group of 184 university students enrolled in the English Department of the University of Algiers 2 in which English is taught through a 3-year LMD program; LMD standing for Licence-Master-Doctorat (Bachlor-Master-Doctorate). This study is centred on the undergraduate cycle (Bachlor Degree) covered in three academic years, including participants from each of the three years of the degree course. To reflect the undergraduate students at different proficiency levels, participants were randomly drawn from each stage of the course, from year 1, to year 2, to year 3; and the data was collected around the end of the academic year. For the sake of validity, and in order to give a more complete picture of the process of vocabulary learning and VLS use, a fourth group of freshly-enrolled participants was added to the research sample. This group consists of 30 students -referred to in this study as BAC- who had just enrolled in the first year of the degree course, and the data collection for this group took place before any teaching had started. As such, the population was selected as follows:.

- N= 30 freshly enrolled students (BAC students/ Low-intermediate)
- N= 81 First year students (Pre-intermediate)
- N= 37 Second year students (Intermediate)
- N= 36 Third year students (Advanced).

3.3. Procedures

The data collection instruments comprise:

- The 14000-item (version A) Vocabulary Size Test (VST) (Nation 2007) to measure the written receptive vocabulary knowledge and growth,
- Vocabulary Learning Strategies Questionnaire adapted from Schmitt (1997) aiming at determining the profile of the students in terms of VLS use and awareness from Year 1 to Year 3 of the degree course,
- Vocabulary Learning Open Questions to collect students' thoughts in terms of their overall vocabulary learning habits, preferences and difficulties. The questionnaire also attempted to draw a picture of the participants overall exposure to English outside the classroom, in a foreign language environment like Algeria where English is rarely used outside educational institutions. The subjects were thus questioned about their access and use of English speaking multimedia such as television channels and the internet.

For the sake of validity, the same instruments were used for each of the four sample groups of the study because the aim of the study was to demonstrate the vocabulary knowledge level of participants at specific stages of their learning process using standardized tests. Since the VLS questionnaire was based on Schmitt's taxonomy, the questions followed the same categorization and order of strategies. Thus, the participants were first asked about what they do when they do not know or understand a word, i.e., about Discovery Strategies, then about what they do to reinforce the word and retain it after discovering its meaning, that is Consolidation Strategies. The questions were organized in a table, and the participants had

to indicate the frequency of use of each specific strategy by simply ticking the appropriate box on a four-point Likert scale.

As shown on Appendix 1, item 54 of the VLS questionnaire is related to the use of English-language media (songs, movies, newscasts, etc.). When Schmitt (1997) talks about English language media as a means of improving and consolidating vocabulary knowledge, he meant songs, movies, newscast, etc. However, one has to note that this taxonomy was set up in 1997, a period during which the high-technological devices that we all know and have access to nowadays such as the Internet were for many quite unknown or simply not accessible enough. Therefore, besides keeping the strategy item as mentioned by Schmitt (item 54), for the purpose of this study, the researcher decided to add two other variations to this item: One acknowledging the use of the Internet as a research engine to improve vocabulary (item 54*), and another one about the use of the Internet to communicate with others using the English language (item 54**). It was believed that making this modification in this item would make the questionnaire more realistic to the participants of the study, as all of them were young people and quite dependent on internet in general.

4. Results and Discussion

Results obtained from the various research tools have demonstrated that the vocabulary size did grow from the low-intermediate level (BAC) until the advanced level, but this growth was moderate as it went from an average size of 5924 words for the BAC group, 6410 words for the 1st sample, 7243 for the 2nd sample, and 7500 words for the final 3rd sample. In other words, there was an average gain of 525 words per year over the three years of the course. If this evolution was in average moderate, it was more significant when moving from year 1 to year 2, with a jump of 833 vocabulary gains, which might reflect the impact that the second year instruction had on vocabulary development, knowing that the data collection took place at the end of each academic year. However, one cannot allocate the vocabulary size growth pattern to the English degree instruction exclusively. Indeed, the majority of participants declared having frequent access to internet (up to 80%) and to English speaking TV channels (over 76%), which might indicate that these participants made use of other input sources outside the classroom.

Taking the VLSs in terms of the six categories of Schmitt (1997) comprised in the VLS questionnaire, the low-intermediate, intermediate and advanced sample groups seemed to use Determination and Metacognitive categories frequently, while the Memory and Cognitive Strategies were moderately used, and the Social Categories were the least frequently used. The pre-intermediate participants though had a preference mainly for Consolidation Social Strategies, and unlike the other groups, the Metacognitive Strategies were at the bottom of the six categories. The preference for Determination and Metacognitive Categories is in line with the findings of a large number of studies undertaken in various EFL contexts (Hamzah et al 2009, Gu 2010, Tanye & Ozturk 2014, Mahmoud et al., 2017).

In terms of the nature of the VLS used individually, the results of the present study again show that the participants' behavior seem to be significantly identical. When analyzing the use of various strategies and establishing a top-10 classification of the most frequently used ones, the four sample groups demonstrate the same preferences, reflecting a very limited evolution in terms of VLS choice. To consolidate the meaning of the lexical items encountered, the participants of the present study also have many similar strategies, frequently preferring multimedia related metacognitive strategies, as well as memory strategies implying memorization through the use of word forms (written and aural), personal experience, or already existing cognates. When asked to add any strategies that were not mentioned in

Schmitt's taxonomy, many participants from the four proficiency levels confirm their particular attraction to multimedia devices as supports to improve and reinforce their overall vocabulary learning. Using cell phone applications, movies with subtitles, translations of songs, listening to audio books, or keeping phones and computers in English- when most of these devices are usually in French or Arabic- are some of the metacognitive techniques they stated to use in order to enrich their EFL input outside the classroom. These answers confirm again the strong reliance on multimedia devices that was noticed in the results of the VLS questionnaire, as these strategies were among the most frequently used (in the top-ten) among the participants of all four proficiency levels of the present study. In a FL environment like Algeria where English is used almost exclusively inside the classroom, university students who are studying English with the purpose of getting an English language related profession might feel frustrated because of the lack of TL input. Thus, the use of multimedia devices such as internet or English speaking TV channels as a source of authentic input can be a way for them to compensate for the limited exposure they get in the classroom, and it can demonstrate a certain degree of autonomous learning of EFL vocabulary. The fact that all the participants were young adults sharing more or less the same characteristics and evolving in a typically foreign language environment might explain the impact that multimedia and technology-related devices (cell phone, computers, internet, movies, songs) might have had on their overall vocabulary building. This strong reliance on multimedia related strategies of Algerian students is in line with the findings of other studies undertaken with Arabic speaking EFL learners for whom strategies such as watching English speaking TV are quite popular and used as an important source for vocabulary learning (Hamzah et al 2009, Mahmoud et al 2017)

When analysing the correlation between the types of VLS used and the overall vocabulary size of the participants, results show that when taken as a global category, the metacognitive strategies showed only an average correlation with vocabulary size among the BAC sample. However, when taken separately, some metacognitive strategies emerged as having a high correlation and thus explaining significantly the growth of vocabulary size of the low-intermediate participants. Strategies involving the use of internet to search for information or to communicate with others using English seemed to have a significant impact on the vocabulary size growth of the participants who had just joined the university. These results concord with the findings explained above demonstrating that the two strategies labelled Met 54* and Met 54** were among the most frequently used consolidation strategies, along with other multimedia-related devices. These findings are in line with a few other studies in EFL contexts that also found correlation between the use of English-speaking media and the growth of vocabulary size (Hamzah et al 2009, Mahmoud et al 2017).

The average age of the participants in this work ranged from 18.8 to 21.9 years old, and between 66% and 80% of them declared having access to internet at home, but even if multimedia-related strategies were frequently used by most participants, they are conducive to better vocabulary growth only for the low-intermediate students. An important aspect to mention is the fact that this group consists of students who had just joined the university from high school - before any university instruction had taken place - and therefore this strong correlation mentioned above could not have been influenced by the English degree instruction. One possible explanation for that might be that these fresher's come from high school where English instruction is only part of their mainstream education, thus they feel the necessity to cope with lack of exposure to the TL, and therefore -lack of vocabulary knowledge- through the use of multimedia as source of input. Arriving at the university where English becomes their unique subject and language of instruction, except for some courses in

the humanities which are done in Arabic, the input is then supposed to be much richer and diversified. Thus, the motivation that these students come with might have acted as a driving force to enlarge their vocabulary through diversified sources of input, knowing that motivation of the learners plays a crucial role in achieving success in language learning (Ur 2002).

5. Conclusion

One of the key elements that emerges from the VLS use of the young adults EFL students in the present study is the high reliance on multimedia -related strategies and devices as supports to improve and reinforce their overall vocabulary learning; and the use of the Internet seems even to be significantly correlated to vocabulary size growth for the newlyenrolled freshers. The fact that most participants of the present study reported using multimedia devices as a way of improving their understanding and consolidation of vocabulary might be an indicator of another source of input that could have a role in the growth of their overall vocabulary size. In other words, being in a FL environment in which exposure to the target language is limited to the classroom, the participants might be using multimedia resources as other sources of input to gain more vocabulary. Findings of the present study also demonstrate that the metacognitive strategy involving the use of internet to search for information or to communicate had significant correlation with vocabulary size growth among the low-intermediate students who had just joined the undergraduate course. It would therefore be interesting to encourage the students at different proficiency levels to use such multimedia devices to improve their vocabulary knowledge outside the classroom. Given that most students declared having access to internet and English language TV channels, teachers might for instance consider giving them assignments in which they would summarize what they saw on TV, asking them to watch a specific TV show at home and discuss about it in the classroom, listening to specific songs and focusing on the vocabulary in the lyrics, listening to the large number of free recordings available online and that are created for English language learning, etc. The fact that the students are young adults who are usually very much interested and motivated by multimedia and social networks, finding ways to use these tools in a way that serves vocabulary learning would be worth considering. For example, the teacher can ask the students to allocate a specific amount of time on social media to converse with other EFL learners worldwide in order to diversify their input and practice more social strategies, as this category of strategies is reported by the students to be the least frequently used. If supervised by the teacher and used with the purpose of learning, such tools can be very beneficial in diversifying and developing the vocabulary knowledge of the EFL learners.

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Appendices

Appendix 1

Schmitt's Taxonomy of Vocabulary Learning Strategies (Schmitt 1997 – pp.207-208)

Strategies for discovering the meaning of a new word

| Strategy Category | Item number | Strategy Description |
|-------------------|-------------|---|
| Determination | 1 | DET Analyze part of speech |
| | 2 | DET Analyze affixes and roots |
| | 3 | DET Check for L1 cognate |
| | 4 | DET Analyze any available pictures or gestures |
| | 5 | DET Guess from textual context |
| | 6 | DET Bilingual dictionary |
| | 7 | DET Monolingual dictionaries |
| | 8 | DET Word lists |
| | 9 | DET Flash cards |
| Social | 10 | SOC Ask teacher for L1 translation |
| | 11 | SOC Ask teacher for paraphrase or synonym of new word |
| | 12 | SOC Ask teacher for a sentence including the new word |
| | 13 | SOC Ask classmates for meaning |
| | 14 | SOC Discover new meaning through group work activity |

Strategies for consolidating a word once it has been encountered (to increase voc size)

| Strategy Category | Item number | Strategy Description |
|-------------------|-------------|---|
| Social | 15 | SOC Study and practice meaning in a group |
| | 16 | SOC Teacher checks students' flashcards word lists for accuracy |
| | 17 | SOC Interact with native speakers |
| Memory | 18 | MEM Study word with a pictorial representation of its meaning |
| | 19 | MEM Image word's meaning |
| | 20 | MEM Connect word to a personal experience |
| | 21 | MEM Associate the word with its coordinates |
| | 22 | MEM Connect the word to its synonyms and antonyms |

| | 23 | MEM Use semantic maps |
|---------------|------|--|
| | | |
| | 24 | MEM Use "scales" for gradable adjectives |
| | 25 | MEM Peg Method |
| | 26 | MEM Loci Method |
| | 27 | MEM Group words together to study them |
| | 28 | MEM Group words together spatially on a page |
| | 29 | MEM Use new word in sentences |
| | 30 | MEM Group words together within a storyline |
| | 31 | MEM Study the spelling of a word |
| | 32 | MEM Study the sound of a word |
| | 33 | MEM Say new word aloud when studying |
| | 34 | MEM Image word form |
| | 35 | MEM Underline initial letter of the word |
| | 36 | MEM Configuration |
| | 37 | MEM Use key word Method |
| | 38 | MEM Affixes and roots |
| | 39 | MEM Part of speech |
| | 40 | MEM Paraphrase the word's meaning |
| | 41 | MEM Use cognates in study |
| | 42 | MEM Learn the words of idioms together |
| | 43 | MEM Use physical action when learning a word |
| | 44 | MEM Use semantic feature grids |
| Cognitive | 45 | COG Verbal repetition |
| | 46 | COG Written repetition |
| | 47 | COG Word lists |
| | 48 | COG Flash cards |
| | 49 | COG Take notes in class |
| | 50 | COG Use the vocabulary section in your textbook |
| | 51 | COG Listen to tape of word lists |
| | 52 | COG Put English labels on physical objects |
| | 53 | COG Keep a vocabulary note book |
| Metacognitive | 54 | MET Use English language media (songs, movies, newscast, etc.) |
| | 54* | MET Use English Internet to search for information using English language |
| | 54** | MET Use English Internet to communicate using English language (emails, social networks) |
| | 55 | MET Testing oneself with word tests |
| | 56 | MET Use spaced word practice |
| | 57 | MET Skip or pass new word |
| | 58 | MET Continue to study over time |
| | | |

Items in red were added by the researcher for the purpose of the present study