

Asmaa Muhammad Abdullah Muhammad

The Effect of the Radiant Thinking Strategy Based on Metacognition Theory on Oral Translation Skills (Case study)

Asmaa Muhammad Abdullah Muhammad

*A Researcher at Al Azhar Observatory for Combating Exteremism
Abstract*

In some researches on ESL speaking, some evidence was found of reliance on top-down processes. This paper explores the radiant thinking strategy with its mapping techniques when being applied on oral translation skills while translating from English to Arabic language. And, the flexibility of using one of the four techniques of mapping is approved. Also, the combination between more than different maps is used according to the word case and the radiating usage. This paper also is planned to make use of the metacognition philosophy to the planning for the strategy, and to the planning for the learning hour. Moreover, metacognition is used here for assessing the skill of reading comprehension, and the process of retention through post and post- post tests, and to evaluate the two processes of teaching and learning. The researcher also divided the four skills of translation to sub skills trying to adjust the process of learning translation as a whole. The very new issue in such a research is the combination of the four skills of oral translation together, and the unique issue, is the use of case study methodology in teaching translation to observe even a bit of a change in a sub skill while the processes of teaching, and learning. This means that the researcher aims at enhancing not only the learning process but also the teaching process through a comprehensive strategy.

Key Words: Metacognition ; RadintThinking ; Translation Skills ; Case Study ; English

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أثر إستراتيجية التفكير المشع على قدرة ما وراء المعرفة

في تنمية مهارات الترجمة الشفهية

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الملخص العربي

تستكشف هذه الورقة البحثية إستراتيجية التفكير المشع بتقنيات رسم الخرائط عند تطبيقها على مهارات الترجمة الشفهية الأربع أثناء الترجمة من اللغة الإنجليزية إلى اللغة العربية. كما برهنت الورقة على مرونة استخدام الأساليب الأربعة إحداها أو مجتمعة للتفكير المشع وهي: الخرائط الذهنية، وخرائط المفاهيم، و الرسم المفاهيمي، والاستعارات المرئية وبتطبيق التبادل المرن بين تلك الأساليب بناء على ما خلصت إليه رسائل سابقة تم الجمع بين أكثر من خريطة وفقاً لحالة الكلمات والاستخدام المرن لها. تهدف هذه الورقة أيضاً للإستفادة من فلسفة ما وراء المعرفة في التخطيط للاستراتيجية والتخطيط لساعة التعلم. علاوة على ذلك، يتم استخدام فلسفة ما وراء المعرفة هنا لتقييم مهارة الفهم القرائي، وكذلك قياس عملية الاستبقاء لأثر المعلومات في الذاكرة من خلال الاختبارات البعيدة وما بعد بعد، ولتقييم عمليتي التعليم والتعلم. كما قسمت الباحثة مهارات الترجمة الأربع إلى مهارات فرعية في محاولة لإمام عملية تعلم الترجمة ككل. القضية الجديدة جدا في هذا البحث هي الجمع بين المهارات الأربع للترجمة الشفهية معا وهي: الفهم القرائي والبحث والتفكير التحليلي وكذلك تكوين جمل جديدة، والقضية الفريدة، هي استخدام منهجية دراسة الحالة في تدريس الترجمة لملاحظة حتى القليل من التغيير في أية مهارة فرعية أثناء عمليتي التعليم والتعلم. وهذا يعني أن الباحثة هدفت إلى تعزيز ليس فقط عملية التعلم ولكن أيضاً عملية التعليم من خلال استراتيجية شاملة.

الكلمات المفاتيح: ما وراء المعرفة- ال ل ع - مهارات الترجمة- دراسة الحالة- اللغة الإنجليزية

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Introduction*

Translation as one of the most important elements in the processes of learning&teaching English language is now pretended to be the most important of all.. Once language teachers are aware of their students' perceptions, they can plan and implement methods and activate the learning process that would perhaps encourage learners to get involved more in the English language learning process. To enhance such a process, the use of metacognition for planning to the processes is a bright issue.

the Role of Translation in EFL classes

On the basis that English is the language of science, so it is so important to ensure that translation as a process should be accurate, and to the point. In addition, translation has a great role in EFL playing as a teaching strategy. It facilitates learning& teaching processes. Translation facilitates the understanding of difficult concepts (i.e. grammar, vocabulary) in foreign language teaching. Kern (1994) asserted the role of translating as a cognitive strategy in the L2 (second language) reading comprehension process. Kern also mentioned that students often used translation to understand the text. (Kern, 1994)

Translation and Class Activities

Furthermore, with regard to the classroom activities, it has been proven that translation can be used purposefully and communicatively to raise students' awareness of their problems in

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oral skills. Additionally, these tasks which make use of authentic materials are interactive and learner-centered, consequently complying with some of the key pillars undergirding. Hollins in this scope added, “Effectiveness in teaching is a dynamic ability”. (Hollins, 2011)

Adams&Pierce asserted that the effective teaching which is “mere reliance on extensive teaching experience would not necessarily guarantee effective teaching, because experience can serve only the purpose when an instructor continually adapts classroom techniques to the needs of learners, and engages learners in self-reflection. Instructors must be prepared to teach learners who vary in terms of interest motivation and ability”. (Adams&Pierce, 1999)

To achieve these goals, researchers interested in teaching effectiveness have explored quantity of topics such as; teacher’s personal characteristics, learners educational achievements, and teachers beliefs. (Shavelson& Stern, 1981)

To be concise, translation is salient for all branches of science which for granted are depending upon interactions between variant languages in every science. On these bases, the importance of adopting a new methodology for improving oral translation skills composes an urgent need not only for teaching English, but also for different fields of science.

Method

In this case study research, three students in the third year of the secondary school were invited to participate in the research in the age of 18 years. All of them had been studying English for a minimum of eleven years. This prospective case study was carried out on the three students for four months in private separate sessions, for three sessions a week. Each session lasts for 90 minutes. The students are affiliated to Al Salam School in Al Shoroq Administration, Cairo. The two books included the examples taken

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in this research are allotted for the third year at Al Azhar secondary schools as a special level while the students I work with were in Al Salam School which is affiliated to the Ministry of Education (general School) but at the same age. This contributes to the richness of the research in which the students in the general schools may make more mistakes in translating the Islamic texts, and this is because the lack of their knowledge about Islamic expressions compared with students at Al Azhar as a religious school at the same level. The three students were of the same sex (girls). The texts chosen as examples to deal with are natural texts selected from the two books; “Spot Lights on Islam”, and “Study science”. The researcher preferred not to use any artificial texts for the process of learning translation avoiding the problem of translating isolated sentences.

Study Duration: from September 2019 to December 2019.

- The Research Design

** * Methods of data collection*

Qualitative and quantitative methods of data collection are adopted. The qualitative method was used to collect and analyze data while a quantitative method was used to further strengthen the qualitative data. The independent variable in this research is the Radiant thinking Strategy including (mind maps, concept maps, conceptual diagram, and visual metaphors). Choosing from them is depending upon the case and the best choice is when smoothly interchanging among them. The dependent variables were “oral translation skills” including (reading comprehension, researching, analytical thinking, and production). Students’ tests scores were analyzed.

This research depended upon the results of the research that defined translation skills by Antar Solhy in 2004. Other articles are of great interest to this work which discussed the difference between concept maps, mind maps, conceptual diagrams, and visual metaphors as being techniques of Radiant Thinking Strategy. In Novak’s article in 2006; he argued that the combination of these four visualization

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types can strengthen each other. In another research by Eppler, it is proven that the different visualization formats can be used in complementary ways to enhance motivation, attention, understanding, and recall. (Eppler, 2006)

In another research by Davies, (2010) software mapping tools are discussed. His paper claims that the choice of a given mapping tool largely depends on the purpose or aim to which the tool is used. However, the paper also suggested that these tools may be converging to offer for educators complementary functions. It suggested that this development provides new teaching and learning tools for both students and teachers that will enrich and provide new directions in education in the future.

The four methods of Radiant thinking strategy will be used in complementary way in this research depending upon the purpose of translation and the learning environment. And the software maps will be used by the use of the app. (MindMaster). These four methods are,

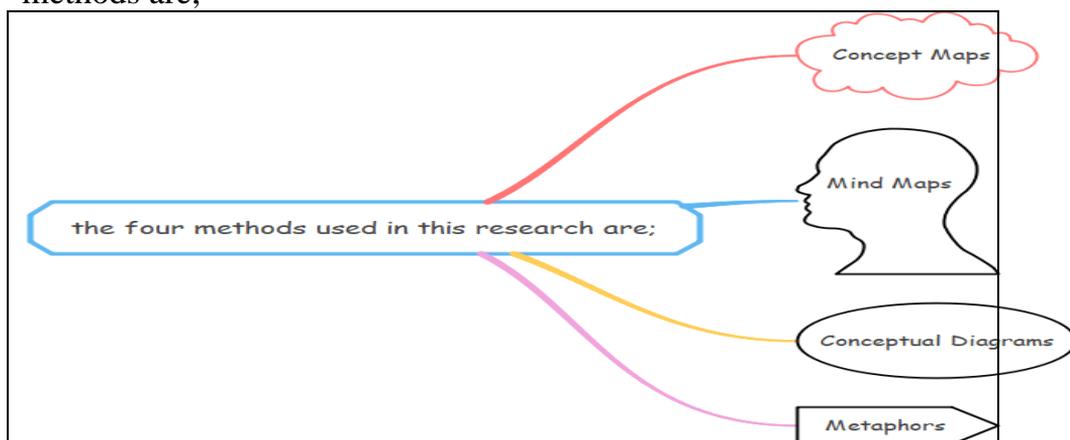


Figure 1
The Four Methods Used In This Research

Based upon the research of Solhy (2004) which suggested the four skills of translation, this current research would cover the four skills. They are,

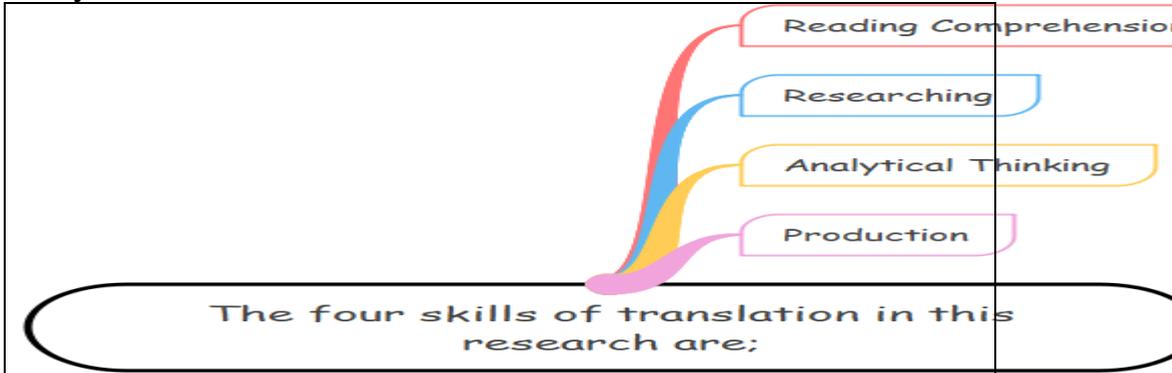


FIGURE: II

The Four Skills of Translation According to the Research of Solhy(2004)

- The four skills of translation which are adopted in this research will be examined separately. And, from this examination adopted from previous researches, the research will extract the sub skills of each major skill as following;

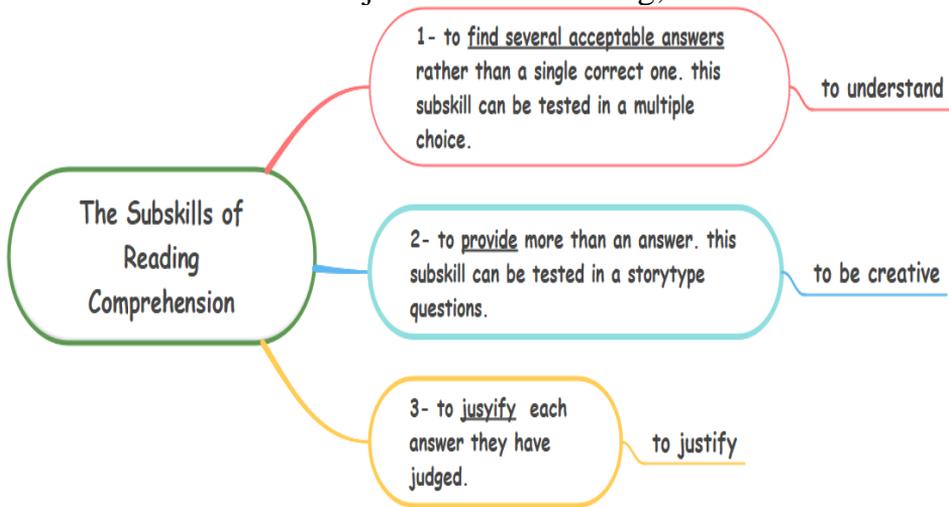


FIGURE 111

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The Sub Skills of Reading Comprehension according to (Cubukcu, 2008) in Her Research;“Enhancing vocabulary development and reading comprehension through metacognitive strategies”.

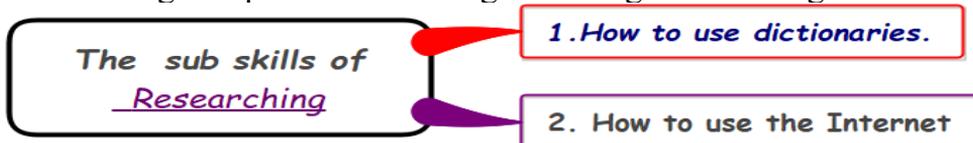


FIGURE IV

Warschauer, M., Shetzer, H., & Meloni, C. F. (2000). Internet for English teaching

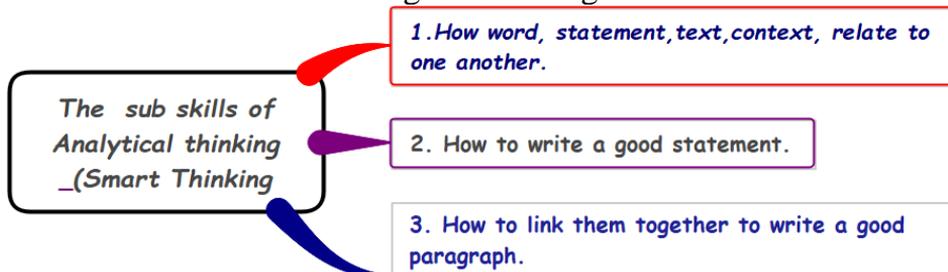


FIGURE V

According to Allen (2003) in his book “Smart Thinking”

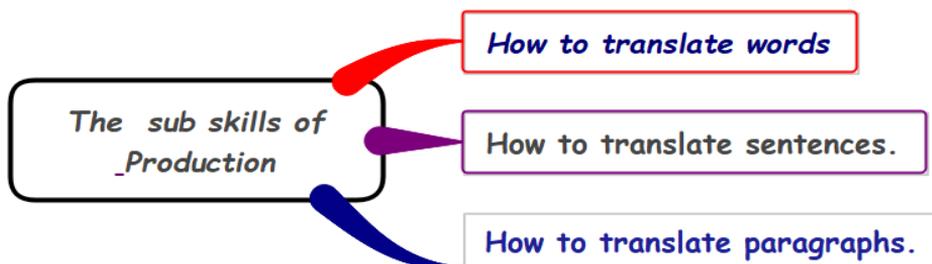


FIGURE VI

Upon The Summary of the “SEVTE” Description Testand Its Scoring Criteria.

- The four domains of teaching English that should be obtained will be;

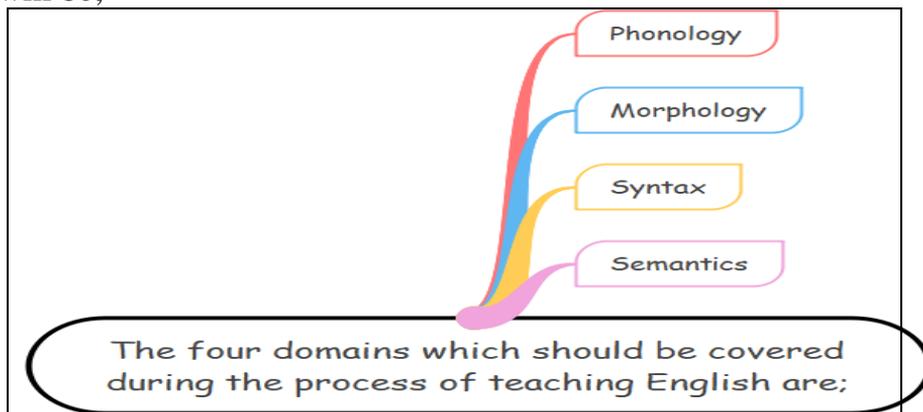


FIGURE VII

The Four Domains in Teaching English

So, to teach oral translation, the core of this current study, the researcher will apply the strategy on four of the main domains which are: 1) Syntax, 2) Semantics, 3) Morphology, and 4) Phonology.

Procedures and Tasks

The researcher intends to apply the strategy of Radiant Thinking which is based upon mind maps to improve translation skills. Mind mapping is one of the most effective techniques used to help students to present information in a visualized form. It is based on the fundamental principles of a human's brain functioning. When making both cerebral hemispheres work. It combines processing verbal and logical information with visual information simultaneously. The main advantage of mind mapping is providing a student an ability to see the studied information as a whole. <https://www.mindmeister.com/blog/mind-mapping-benefits-who-needs-mind-maps/>

As researches mentioned; this technology is efficient in both teaching theoretical and practical subjects and in new ideas generation. It develops creative thinking and imagination that is definitely necessary

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for both translators and interpreters who have to deal with a huge volume of information therefore they need to know tools to process it (Naimushin & Stepanova 2018). Mind mapping, in my view, can be a very effective strategy, not just a tool, in translators' training in both theoretical and practical courses

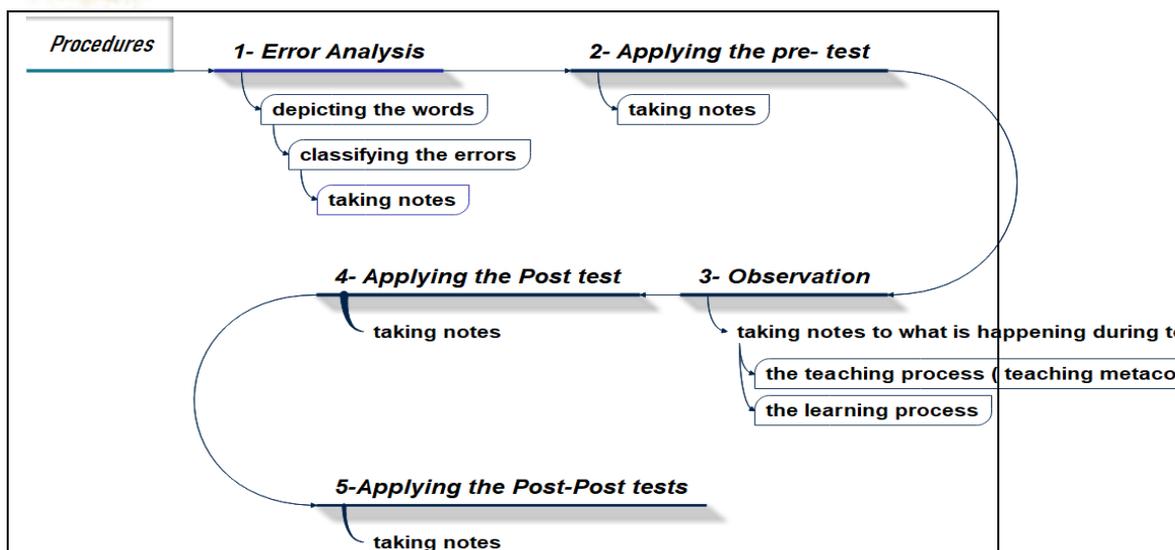


FIGURE VII
A Diagram of The Procedures of this Study

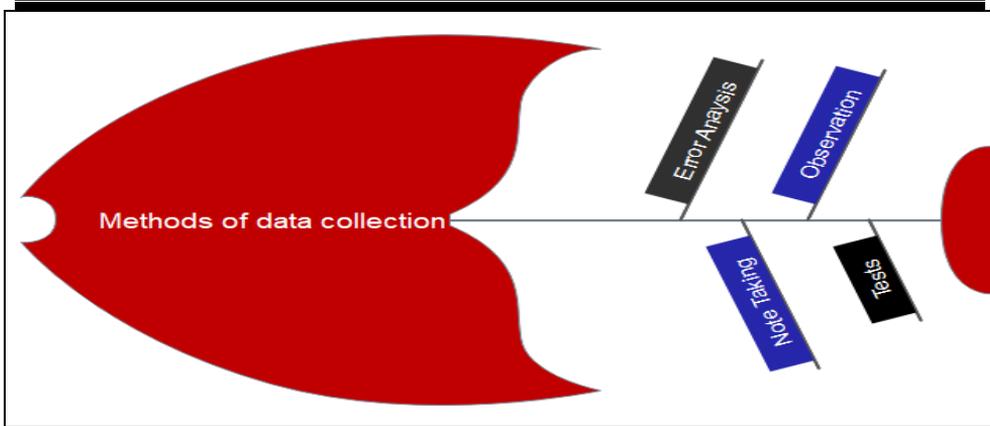
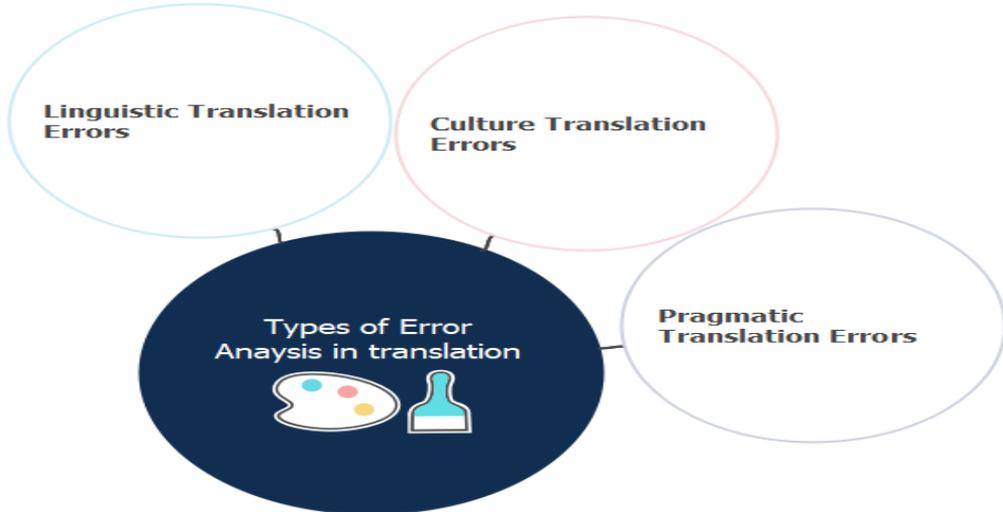


FIGURE VIII
Methods of Data Collection in This Research



- FIGURE IX

- Types of Error Analysis in Translation according to (Zhang, 2016)

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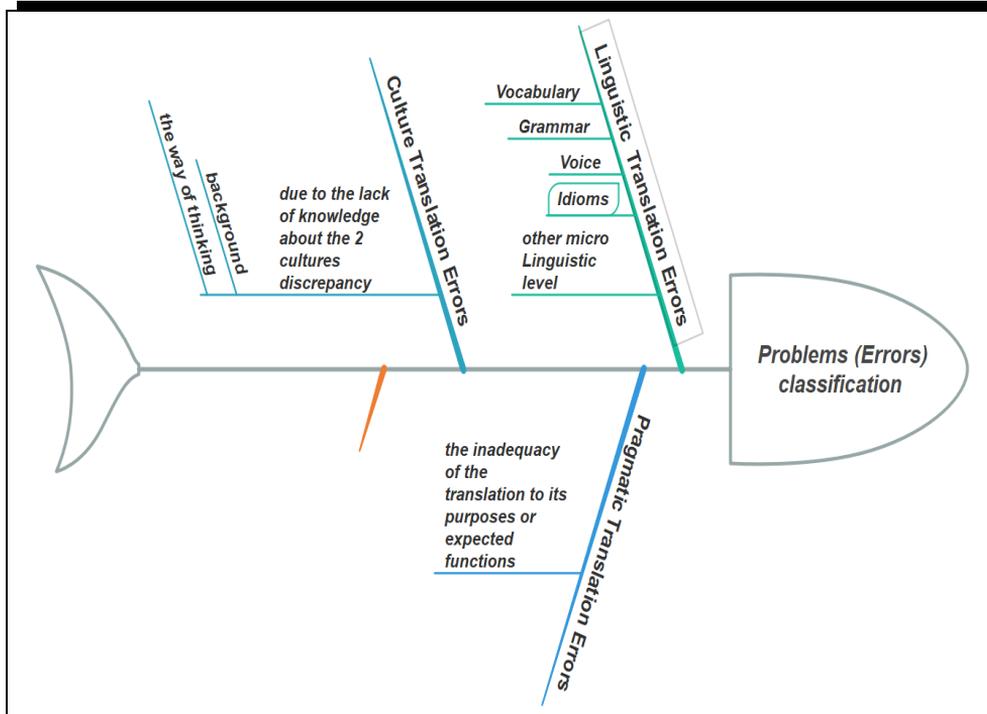


FIGURE X
Error Classification according to (Zhang, 2016)

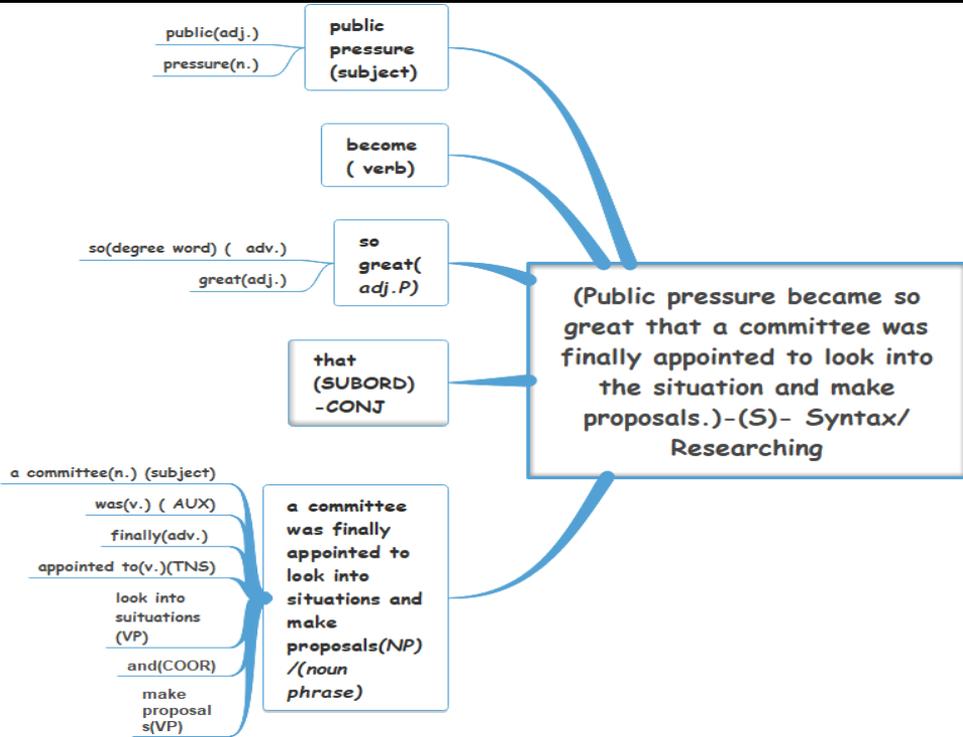


FIGURE XI

An Example of a conceptual diagram for Improving the Skill of Researching in Syntax
In which a sentence is being divided into its syntactic elements

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1) I owe something to somebody. I owe a dbt of gratitude to all my family.

2) You owe it to ypur staff to be honest with them.

3) I owe a duty to my family.

4) Owe somebody something. You owe me a favour!

5) Thanks for sticking up for me- I owe you one (= I owe you a fvour)

6) I think you owe us an explanation.

pay debit

lend deposit

owe money on

Related words



owe(v.)
Analytical
Thinking/
Semantics

FIGURE XIV

An Example of a visual metaphor for Improving the Skill of Analytical Thinking in Semantics

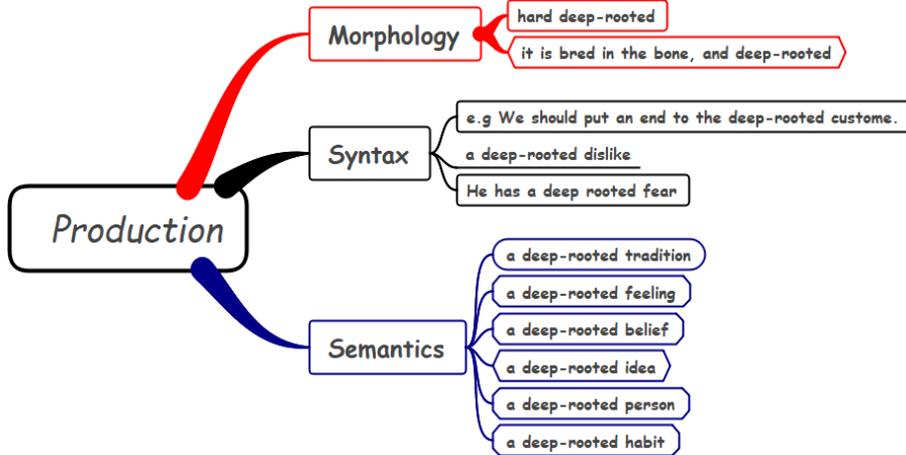


FIGURE XVI

An Example of the Use of Conceptual Diagram for Improving the Skill of Production in Semantics& The Use of Mind Maps in the Same Diagram for the improving of the Same Skill in Both Morphology, and Syntax

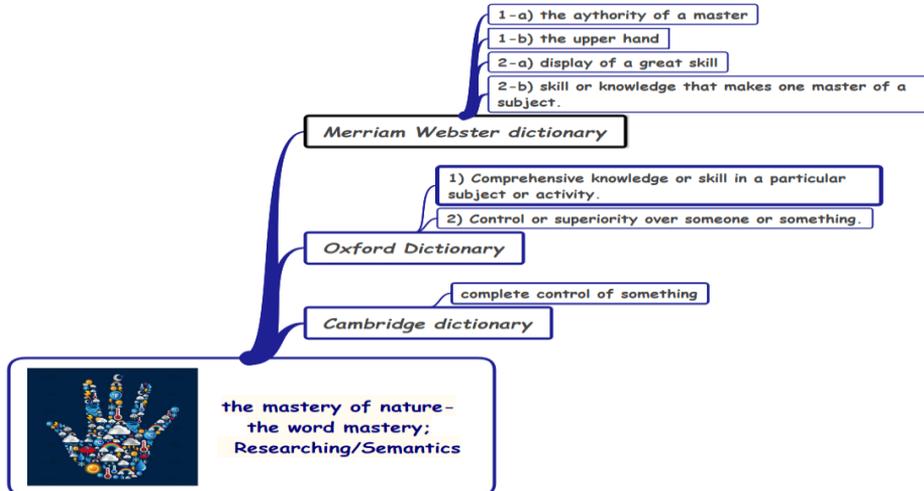


FIGURE XVII

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An Example of The Use of A Visual Metaphor to Improve the Skill
of Researching in Semantics

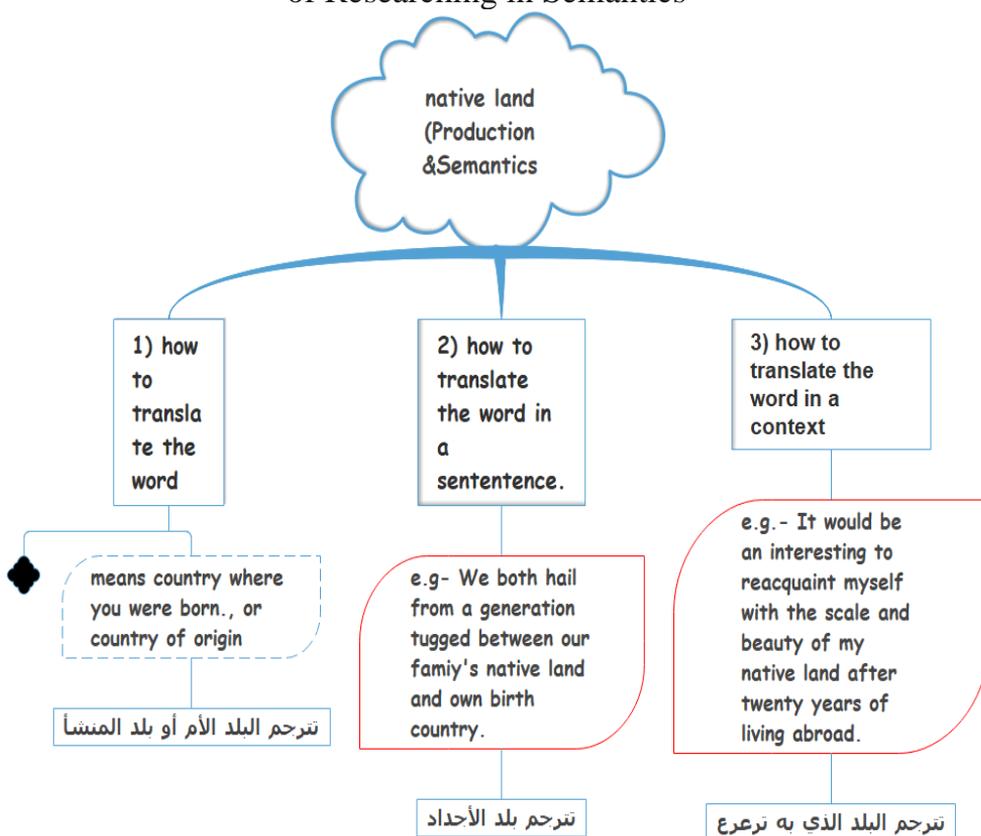


FIGURE
XVIII

An Example of The Use of A Conceptual diagram to Improve the
Skill of production in Semantics

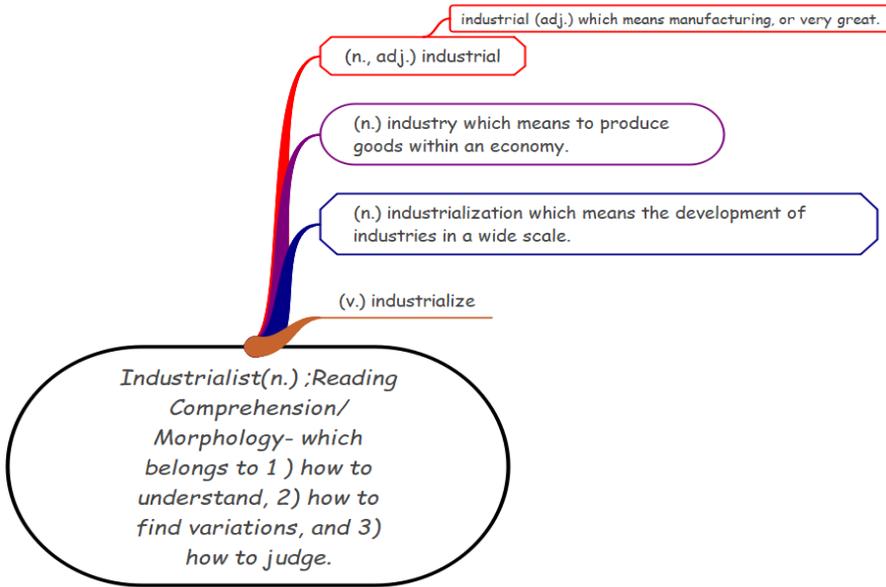


FIGURE XIX

An Example of The Use of A Visual Metaphor to Improve the Skill of Reading Comprehension in Semantics through morphological, or phonological level

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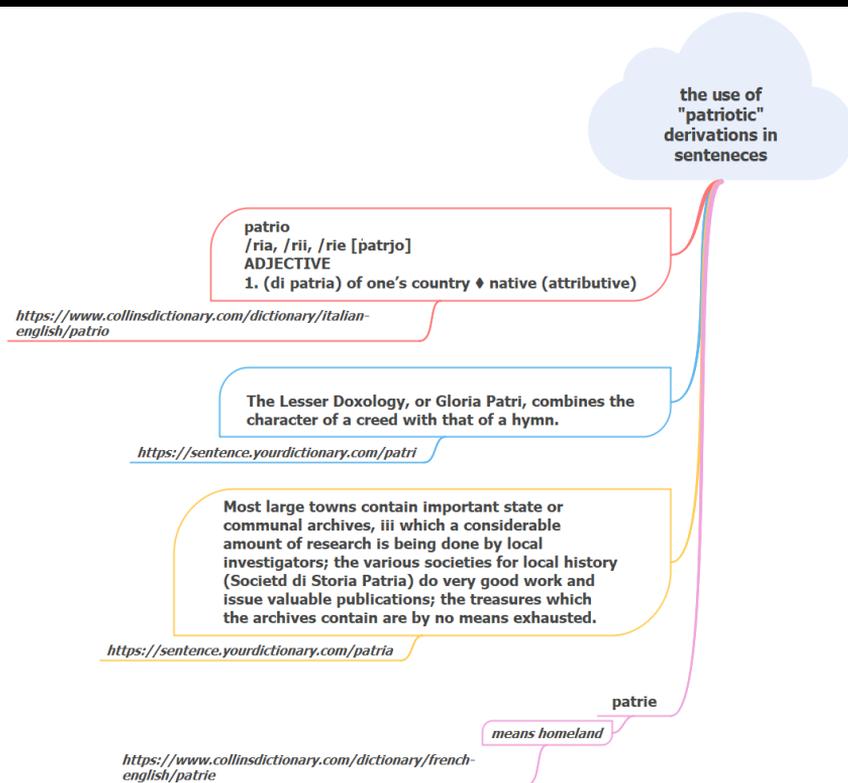


FIGURE XX

An Example of The Use of AMind Map to Improve the Skill of Researching in Semantics through morphology or phonology

Scoring and Analysis

- 1) Data Analysis: This includes the following;
 - a) **Data analysis of the notes taken.**
 - b) **Tracing the development of the skills.**
 - c) **Tracing the development of the sub-skills.**
- -The possibility to use several methods of mapping for the one word for enhancing such improvement is remarkable.

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- -Blending between two different methods of mapping helps in enhancing such a skill.
- Some diagrams in the mind maps design couldn't permit to format the font to be suitable for the ordinary page, so it is better to use the right, or left mapping.
- -We can change the technique of mapping to enhance learning. i.e.; we can change from the ordinary mind map to the metaphor if needed; one could alternate a map in the sub tree map.
- -The words chosen by the technique of error analysis vary and some of which are ambiguous. Others have the mistake of falseness of the syntactic usage in different structures. Others have the mistake of ambiguity. Others have the mistake related to the morphology, and so on. Each kind of mistake was handled separately, or in a combined way that handled more than one mistake.
- -However Concept Map is more effective than the Mind Map as researches proved, when applied in this research, I found that Concept Map is ideal in some branches rather than others; the first is when improving the skills related to the semantics. When working on a generic noun for example. The second of which is in Syntax when applying the syntactic tree diagram of such a sentence.
- -Most examples in this research were taken from the book entitled "Study Science" because of the richness and adaptation of the text. On this basis, the two main error classifications are existed (linguistics & culture). The third of those main error classifications (pragmatic) is existed mainly in the other book "Spot Lights on Islam".
- -As for the skill of Reading comprehension, it can be one of the most important parts for a language learner to master and one of the least favorite topics for teachers to address in the classroom. But most of the students have difficulty with constructing meaning from the written texts.

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- -Research indicates that metacognitive reading strategy awareness promotes both performance and understanding of one's reading comprehension. Research further supports the claim that metacognitive strategies facilitate students' reading comprehension. This scopes with what is being traced, and observed in this research.

RESULTS

- After the continuous follow- up, it was found that there are significant better learning planning for both the teacher (the researcher) and the three students.
- The results pointed to the fact that the four methods of the Radiant thinking strategy had significant effect on improving the four translation skills by the participants because the results from the pre tests and posttests scores showed that there was a significant difference between the mean of performance of the students.
- -There was a significant difference in the performance of the participants. The results pointed to the fact that mind maps, concept maps, conceptual diagrams, and visual metaphors had a significant effect on learning idioms by the L2 participants because the result from the pretest and post test scores showed that there was a significant difference between the mean of performance of the three.
- -The findings of the current study are in agreement with Li (2010) who illustrated the cognitive motivation of English and Chinese idioms based on the conceptual metaphor theory and found most English and Chinese idioms were motivated by conceptual metaphors in a systematic way, and conceptual metaphors accelerated the teaching and learning of idioms. In another study by Gibbs, Bogdanovich, Sykes, and Barr (1997), the role of conceptual metaphors in idioms

comprehension was examined. What they were interested in was to find whether people quickly accessed conceptual metaphors each time an idiom was encountered in discourse. They found that “conceptual metaphors could under some circumstances be quickly accessed during idioms comprehension, and people accessed the appropriate conceptual metaphors when they processed some idioms”.

Kömür and Çimen’s (2009) findings are in consonance with the result of this study. They found that conceptual metaphors affected teaching idioms in an L2 context. They developed lesson plans, and the lesson plans contained activities that enhanced the L2 learners’ metaphorical perceptions in the L2. The results of their study showed that the implementation of those lesson plans enhanced the L2 learners’ metaphorical awareness and enabled them to be successful in understanding idioms. Also, the results pointed to the fact that the effect of conceptual metaphors on learning idioms was significant. The result from the pretest and posttest scores showed that there was a significant difference between the mean of performance of the participants. Other researches serve in solving partial problems of the main problem of translation as Samani, E. R. (2012) who examined “The effect of conceptual metaphors on learning idioms by l2 learners”. This was published on International Journal of English Linguistics, 2(1), 249.so, the application of this study for educating translation as a whole from English to Arabic is expected to make a change in the field of translation.

The performance of the participants in learning idioms, vocabularies, synonyms, reading comprehension, researching, analytical thinking, and constructing is significant by the complementary use of mind mapping, concept mapping, conceptual diagrams, and conceptual metaphors which were proven to facilitate teaching, and learning processes because the scores of the pretest and post test differ to show better learning. It shows that especially metaphor mapping facilitated learning translation skills which are

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pertained to the semantics. The participants who had learned idioms by the mind map technique, or concept map could keep idioms in their minds better because they were familiar with the literal meaning of the words. In addition, they were aware of the fact that most idioms are products of our conceptual system and are not simply a matter of language.

Learning vocabulary, expressions, and idioms presented in an organized fashion is easier than random lists of idioms. Organizing lexis, idioms, and expressions in groups is effective for L2 learners because it facilitates connecting the new items with already familiar ones.

Therefore, it is reasonable to introduce L2 learners grouping of words, idioms, and expressions that are made up of familiar items and just a few recent ones. Idioms can be grouped according to conceptual diagrams, or visual metaphors, or the source domains they have in common, they can learn idioms better and this consequently increase the chance of remembering idioms for longer time which is remarkably observed in the post, and post-post tests.

The book "Mastering Idiomatic English" was chosen to help the participants. Whenever I ask the participants where their difficulties in learning English lie, they invariably give me the response that they do not have enough vocabulary.

One of the most effective ways for students to incorporate new words and expressions into their language is through the study of idioms and idiomatic expressions. Indeed, the Oxford Dictionary of English Idioms (1993) stated in its introduction that the "accurate and appropriate use of English expressions which are in the broadest sense idiomatic is one distinguishing mark of a native command of the language and a reliable measure of the proficiency of foreign learners". That is, once students are able not only to understand idiomatic expressions, but also to produce them, we can say that they have attained a high level of second-language proficiency by

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looking into the study of English from what one may name as “a mathematical way” in which triangles, and actions are taken place not only on the paper, but in their minds also. And that is the thing which the researcher sought to enhance before the implementation of the study.

Many activities may add to the outcomes of the current study. For example; Boers (1999), Deignan, Gabryś, and Solska (1997), Lazar (1996), and Liu (2008) offered sample activities that aim at raising metaphoric awareness and give L2 learners the opportunity to make cross-linguistic comparison. These activities comprise gap-filling exercises, metaphoric themes recognition.

The most important implication of this study is that L2 syllabus designers and curriculum developers can include conceptual metaphors, conceptual diagrams, and concept maps in L2 textbooks as a suitable method in learning idioms.

In fact, this research takes into consideration the levels of L2 learners and examines the study on different proficiency levels. Consequently, it is hoped that future researchers can take into account the matter of classification of a word according to concrete, or abstract. Further research can be done on this matter whether L2 learners can use different mappings automatically when confronting written translation or not.

- Tests have been designed to judge what has been learned. These tests are considered as assessments or evaluations of learned knowledge. Researchers studied learning by trials of study (S) and a test (T). The critical supposition is that learning occurs through study phases, while a test simply measures what was learned in previous study phases (of STSTST ... order). Recently, a study of reviewed evidence opposes this conventional perception: retrieval exercises during tests have often resulted in better learning and long-term retention than studying has.

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In related studies, Roediger& McDermott probed the link between retention and learning with repeated testing, and they suggested that:“The repeated recalling of retained information led to better learning and long-term retention. In one experiment, participants were given a list of items to study under two different conditions. In one condition, the list was studied 15 times and tested 5 times, while in the other condition the list was studied 5 times and tested 15 times. A retrieval task after one week showed better learning and retention results in the repeated test condition as compared to the repeated study. Those studies explained that testing/retrieval is a powerful technique of enhancing memory retention and recall performance. The implications of those are that students should test themselves repeatedly instead of studying the content frequently. However, feedback should be included in the frequent testing technique to avoid errors”. (Roediger& McDermott, 2012)

By using this strategy of testing, it has been noticeable that testing allows recalling stored information from memory. It also minimizes the errors in the recall result and helps to retain correct information. And repeated testing allows the same neurons involved initially in learning to fire repeatedly. The neuronal networks become more stable and synchronized, and recollection of stored information becomes easy. Post-post tests in this study enhance these previous conclusions because of its significant improvement.

Conclusions & Further Directions

Conclusion: The present study sought to be a good guideline for language teachers for any language, but for English teachers in particular. This research helps to compare teachers own perceptions and techniques with the students'. Because of the variegation of the skills of translation adopted in the research, no matter good or poor readers, all the participants took care of skimming and scanning

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strategies, which are included in the comprehension sub-skills of cognitive strategies but good readers think more deeply to recognize and comprehend the texts adequately. Moreover, the idea expands to suit even bad readers because bad readers may be good researchers, or good especially in the skill of analytical thinking. The research in our hands benefits from this diversity which means that it helps to solve the lack in a skill, or master it or even the three other skills depending upon the level of the student. This research paves the way for both teachers and students of translation to use their own drawn map in order to facilitate one's own process of learning.

ACKNOWLEDGMENTS

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NOTES

Continuous follow-up at every session is required for the success of the procedures.

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REFERENCES

- Abdellah, S. (2004). Antar. A suggested programme for developing some basic translation skills of English majors and its effects on their attitudes towards translation. South Valley University Qena Faculty of Education.
- Adams, C., & Pierce, R. (1999). Characteristics of Effective Teaching. *Language Teaching*, 102, 107.
- Allen, M. (2004). *Smart thinking*. Oxford University Press.
- Boers, F. (1999). Learning vocabulary through metaphoric awareness. *Études et Travaux*, 3, 53-65.
- Cubukcu, F. (2008). Enhancing vocabulary development and reading comprehension through metacognitive strategies. *Issues in Educational Research*, 18(1), 1-11.
- Davies, M. (2011). Concept mapping, mind mapping and argument mapping: what are the differences and do they matter?. *Higher education*, 62(3), 279-301.
- Deignan, A., Gabryś, D. & Solska, A. (1997). Teaching English metaphors using cross-linguistic awareness-raising activities. *ELT Journal*, 51, 352-360. <http://dx.doi.org/10.1093/elt/51.4.352>
- Deignan, A., Gabryś, D., & Solska, A. (1997). Teaching English metaphors using cross-linguistic awareness-raising activities. *ELT journal*, 51(4), 352-360.
- Ellis, N. (1994a). Implicit and explicit language learning – An overview. In N. C. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 1-33). London, UK: Academic Press.
- English, M. I. Mastering Idiomatic English: Adjective Phrases. <https://tesl-ej.org/ej15/r3.html> Google Scholar
- Hollins, E. R. (2011). Teacher preparation for quality teaching. *Journal of Teacher education*, 62(4), 395-407.
- <https://www.mindmeister.com/blog/mind-mapping-benefits-who-needs-mind-maps/>
- Kern, R. G. (1994). The role of mental translation in second language reading. *Studies in second language acquisition*, 441-461

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- Kömür, S. & Çimen, S (2009). Using conceptual metaphors in teaching idioms in L2 context. *Muğla Üniversitesi Sosyal Bilimler Enstitüsü Dergisi (İLKE)* Güz, 205-221.
- Lazar, G. (1996). Using figurative language to expand students' vocabulary. *ELT Journal*, 50, 43-51. <http://dx.doi.org/10.1093/elt/50.1.43>
- Li, X. (2010). Conceptual metaphor theory and teaching of English and Chinese idioms. *Journal of Language Teaching and Research*, 1, 206-210. <http://dx.doi.org/10.4304/jltr.1.3.206-210>
- Liu, D. (2008). *Idioms: Description, comprehension, acquisition, and pedagogy*. New York/London: Routledge.
- Martin J Eppler1, (2006) A comparison between concept maps, mind maps, conceptual diagrams, and visual behavior. *Review of educational research*, 51(4), 455-498.
- Naimushin, B., & Stepanova, M. (2018). The Association of Translator and Interpreter Trainers: Building a Network of Teaching Excellence. *Society and Languages in the Third Millennium. Communication. Education. Translation.*, 169-178.
- Samani, E. R. (2012). The effect of conceptual metaphors on learning idioms by 12 learners. *International Journal of English Linguistics*, 2(1), 249.
- Seamon, J. G., Lee, I. A., Toner, S. K., Wheeler, R. H., Good kind, M. S., & Birch, A. D. (2002). Thinking of critical words during study is unnecessary for false memory in the Deese, Roediger, and McDermott procedure. *Psychological Science*, 13(6), 526-531.
- Stight, T. G. (1979). Educational uses of metaphor. In A. Ortony (Ed.), *Metaphor and thought* (2nd ed., pp. 474-485). Cambridge: Cambridge University Press.
- Zhang, L. (2016). Error analysis of business English translation based upon functional theory. *Advances in literary study*, 4(3), 37-40.

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