



A PROGRAM BASED ON SELF-REGULATION FOR DEVELOPING SECONDARY SCHOOL STUDENTS' EFL SEMANTIC AWARENESS

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ABSTRACT

Introduction: Semantic awareness poses challenges for many learners. In Egypt, many students who learn English as a foreign language have deficiencies in comprehending the semantic awareness process. In order for students to achieve a good level of competence, those students need to apply strategies which have a scientific effect on developing levels of semantic awareness in English. The focus of the research is to develop the semantic awareness of secondary school students by a program based on self-regulation.

Method: Sixty first-year secondary students were enrolled in the second semester of the academic year (2024-2025) participated. They were split up into two groups; experimental (n=30) and control (n= 30) respectively. Since the participants were purposefully chosen, it was considered that they made up a homogenous group. SPSS program was used for data analysis.

Results: Findings from this study indicated the program based on self-regulation developed the secondary students' school EFL semantic awareness in the experimental group.

Discussion and conclusions: On the basis of the findings, the study advocates the program based on self-regulation for developing the secondary students' school EFL semantic awareness in the experimental group.

Keywords: Self -regulation; semantic awareness skills; Secondary school.

Introduction

With the rising priority of having knowledge, learners are directed to track innovative and accurate information, and hence, it is more superior to scope creative and advancing ideas. One of the most creative and productive pathways to reach original and pioneering information is EFL semantic awareness. Shedding the light on EFL semantic awareness became a basic requirement in teaching and learning English in our classrooms. It encourages learners to comprehend a fascinating image of a text. They refresh ideas, emotions and feelings to go beyond the text.

Scheler (1993) declared some problems of lexical semantics such as, problems of lexical semantics, Lexical disambiguation, Lexical reversible, Neologisms, Idiomatic usage and Sub-metaphor. He also introduced some other problems of semantic methodology to be avoided such as, problems of syntactic structure, problems of conferences and anaphora and problems of logical semantics.

Consequently, Moreno (2015) declared Semantics as the historical and psychological sides and arrangement of variations in the implication of words or forms to enhance the meaning of the words and phrases obtainable in a language. To convey messages and to cause about the meaning of what a text is trying to express or what teacher is telling, learners require some tools to strengthen this process of learning to be skilled by giving accurately semantics.



Weller et al. (2019) proposed that semantic information can modify primary awareness. Semantic information may prompt such variation by adjusting the perceptual demonstrations of the innovative objects designed during teaching, ensuing in more proficient bottom-up transmission of information. On the other hand, feedback from fore-visual building block can follow beginning motivation. Semantic information may utilize an inspiration over learning areas in the arrangement of feedback, subsequent in a variation of the mechanisms. Thus, behavioral displays of the effect of semantic information on mindful awareness may only befall in conditions of improved perceptual difficulty. A learning procedure was utilized to overcome semantic awareness difficulty. This procedure presents a sequence of primarily unfamiliar object pictures and the extent of semantic information provided for each object was handled.

McMillen et al. (2023) clarified that the difficulty of semantic awareness learning can be centered on learners' accuracy, as their performance reveals the termination of meeting sociocultural and evolving influences which may be named as Item difficulty, Item difficulty is a psychometric property that measures the simplicity of a test item. In classical test theory, item difficulty is assessed by scheming the percentage of learners who reacted properly to an item, such that higher scores point to an easier item whereas lower scores point to a somewhat more difficult item. These groups of items within each task kind measure a learner's ability and awareness in a particular area and can be used to control patterns of strength or weakness. Not all semantic task kinds have identical task difficulty. The most difficult tasks in source language involved communicative linguistic concepts and communicative connotations. The most difficult tasks in English involved communicative representative properties, communicative linguistic concepts, and communicative connotations.

In this line, Efklides & Metallidou, (2020) showed that Self-regulated learning (SRL) states that students being responsible for their learning. It includes goal setting as well as regulation of cognition, reactions (affect), motivation, and activities. A critical component of SRL is metacognition, whose role is to monitor and control cognitive processing. Metacognition has three aspects, specifically metacognitive experiences, metacognitive knowledge, and metacognitive control. Each of them gives different ways to the regulation of learning. Precisely, metacognitive experiences and metacognitive knowledge assist the monitoring of cognition and provide information necessary for control resolutions such as allocation of study time or strategy use. Metacognitive control covers metacognitive strategies (or skills) such as coordination, planning, inspection, and evaluation.

In order to help students, comprehend meanings, it is important to encourage the students to regulate themselves, to read in English, and write some texts. So, the researcher focused on self-regulation as a means to improve the students' EFL semantic awareness skills. Actually, self-regulation was commonly used in physics, Science and Math studies but recently, it is time to focus on self-regulation-based methods to develop the English language.

In this sense, Newman & Newman (2020) declared that self-regulation theories center on the technique's learners direct the course of their improvement as they select and follow aims and adjust aim recreation created on subjective and conservational opportunities and controls. Perceptions from self-regulation theories that lecture learners' improvement embrace the SOC Model; a sense of determination; and self-purpose theory. Five approaches to assessment are designated such as, the structure of psychological well-being; organismic self-regulation, the SOC questionnaire, notions of purpose in life and self-determination processes.

From the prospective of scientific literature, Wijaya, (2021) showed that by becoming more



self-regulated academicians, EFL learners would be more proficient to mechanism their targeted learning environments, means, strategies, and time in a better determination to grasp the anticipated learning products. Regarding this belief, the central role of self-regulation in universal EFL learning contexts involves 3 chief definite self-regulated learning strategies profoundly impacting EFL learners' accomplishment in attaining more adequate target language learning effects and successes specifically cautiously planning learning goals, profound monitoring, and constant assessment. In the beginning self-regulated learning stage, EFL learners are demanded to carefully create more raised learning plans by noticeably perceptive the learning tasks and processes they are going to participate. incentive EFL educators to constantly help their learners in designing their learning aims since the effective achievement of these specific pre-determined learning aims will boost learners' learning inspiration to preserve their standard learning performances in future procedures. In the resulting stage, EFL learners are allocated to wisely monitor their constant learning creativities by strongly matching the learning strategies along with exertions they have used to achieve the specified learning tasks.

Self-regulation is not an inert or an instinctive psychological concept, yet it denotes a dynamic psychological lively process to assist EFL learners to report more effective controls over their targeted learning behavior, determinations, and strategies to completely grasp the targeted learning objectivities.

Bai & Wang, (2023) stated that Self-regulated reading-to-write can be represented as learners' proactive learning of useful elements (e.g. content, rhetorical features, and conventions) from reading by using strategies, which is an active mechanism involving reading and writing, to develop their writing competence. They introduced six main types of self-regulated strategies, i.e. mining reading, writerly reading, cognitive strategies, purposive reading, recalling while writing, and peer revision reading that can contribute to writing competence were included in the proposed self-regulated framework. Main differences in self-regulated strategy use among the high, average, and low participants were identified. Results showed that self-regulated strategy use had positive influences on writing competence. This is the first time that reading-to-write is proposed from a self-regulated learning perspective in ESL/EFL school contexts.

Objectives and hypotheses

The general objective of this research was to develop the secondary students' school EFL semantic awareness by a program based on self-regulation. This objective is specifically focused on:

- a) EFL semantic awareness at the word level.
- b) EFL semantic awareness at the paragraph level.
- c) EFL semantic awareness at the essay level.

Based on previous literature and the researcher objectives, the following hypotheses have been formulated:

H1: It was hypothesized that there is a statistically significant difference between the mean scores of the experimental and control groups on the post administration of the semantic awareness skills test results, in favor of the experimental group ones. According to Table 1, the experimental group outperformed the control group in the EFL overall semantic awareness skills and sub-skills. This hypothesis was thus validated (Table 1).

H2: It was hypothesized that there is a statistically significant difference between the mean scores of the experimental group in the pre-posttest results of overall EFL semantic awareness and



its sub-skills, in the favor of the post-test ones. The experimental group's post-test mean scores were higher than the pre-test means for EFL semantic awareness skills and its sub-skills. This hypothesis was thus validated (Table 2).

H3: It was hypothesized that using the program based on self-regulation has a positive large effect on the experimental group students' EFL semantic awareness skills. In the EFL overall semantic awareness skills test, the experimental group's effect sizes were greater than the pre-group's. this hypothesis was validated (Table 3).

Method

The current research adopted the quasi-experimental design as a major source for data collection in which participants were divided into two groups (control and experimental). The experimental group was taught through the program based on self-regulation while the control group was taught in a regular standard manner.

Participants

Sixty first-year secondary students from El Qawmia El Arabia private schools, Sharkia Governorate, who were enrolled in the second semester of the academic year (2024 – 2025). They were assigned into two groups, experimental (30) students and control (30) students. It was assumed that the participants formed a homogenous group as they were drawn deliberately. So, they were expected to have a lot in common and would not diverge much concerning the quality of experience or their age.

Instruments

The instruments listed below were created, verified, and put into use.

1. A questionnaire was designed to determine the most important EFL semantic awareness sub-skills to be developed among the first-year secondary students. The results of the questionnaire were used to construct the EFL semantic awareness skills test that would be.
2. An actual pre-posttest used to determine the participants' level in EFL semantic awareness.

Procedures

The students were trained using a program based on self-regulation for developing EFL semantic awareness skills. Students received 5 training sessions a week, lasting between 40 and 45 minutes. Reviewing the literature and the previous studies related to the program based on the self-regulation and EFL semantic awareness. Designing the EFL semantic awareness questionnaire, then presenting it to the jurors to verify its validity. Then, Identifying the target EFL semantic awareness skills according to the jury's panel opinions, Designing the final version of the EFL semantic awareness test for implementation, submitting the test to the jurors to verify its validity and suitability. Modifying the test according to jurors' opinions in the final form, dividing the 60 participants into two groups, a control group and an experimental one, designing a program based on self-regulation and determining its objectives, content, activities, reflection and evaluations, pre-administering the test to the study groups, implementing the program based on self-regulation materials to the experimental group, at the same time, teaching the control group via the regular method of teaching, post-administering the test to the two groups, comparing the results of both administrations, analyzing the results statistically and interpreting the results



considering the research hypotheses.

The experimental participants' EFL semantic awareness was developed significantly during the administering of the program based on self-regulation as shown from the differences between the pre and post test results, in favour of the post administration. The experimental participants were conscious of the mental processes taken place in their mind during EFL semantic awareness process as they were able to plan, design, control, monitor, create and evaluate during the learning process. So, they executed the skills effectively.

Data analysis

The study's hypotheses were tested using a t-test to observe if there were any differences between the treatment group's mean scores on the EFL semantic awareness skills test before and after administration. This was done in order to ascertain the impact of the program based on self-regulation for the development of EFL semantic awareness skills.

Table 1: t-test of the mean scores of the post-measurement of the control group and the experimental group

Dimension	Group	N	Mean	Standard deviation	df	t.value	Sig
EFL Semantic Awareness at the word- level	control	30	6	0.83	58	6.6	0.05
	experimental	30	7.8	1.2			
EFL Semantic Awareness at the paragraph- level	control	30	5.8	1.2	58	7	0.05
	experimental	30	8	1.4			
EFL Semantic Awareness at the essay- level	control	30	6.4	1.1	58	8.2	0.05
	experimental	30	8.6	1.6			
Total	control	30	16.7	1.8	58	12.5	0.05
	experimental	30	23.3	2.8			

*Significant at (0.05)

Table 2: t- test results of comparing of the pre- and post-measurements of EFL Semantic Awareness test.

Dimension	Test	N	Mean	Standard deviation	df	t. value	Sig
EFL Semantic Awareness at the word- level	Pre	30	4.9	0.85	29	16.6	0.05
	Post	30	7.8	1.2			
EFL Semantic Awareness at the paragraph- level	Pre	30	4.6	0.89	29	17	0.05
	Post	30	8	1.4			
EFL Semantic Awareness at the essay- level	Pre	30	5.5	1.2	29	18.4	0.05
	Post	30	8.6	1.6			
Total	Pre	30	14.6	1.5	29	31.5	0.05
	Post	30	23.3	2.8			

*Significant at (0.05)



Table 3: Results of Cohen's equation comparing the pre to post administrations of the experimental group in EFL Semantic Awareness test.

Dimension	Test	N	Mean	Standard deviation	df	t. value	Effect size	Value
EFL Semantic Awareness at the word- level	Pre	30	4.9	0.85	29	16.6	0.82	Large
	Post	30	7.8	1.2				
EFL Semantic Awareness at the paragraph- level	Pre	30	4.6	0.89	29	17	0.84	Large
	Post	30	8	1.4				
EFL Semantic Awareness at the word- level	Pre	30	5.5	1.2	29	18.4	0.85	Large
	Post	30	8.6	1.6				
Total	Pre	30	14.6	1.5	29	31.5	0.88	Large
	Post	30	23.3	2.8				

***Significant at (0.05)**

Discussion and conclusion

Based on the general objective of this study, it is concluded that there were differences in mean post-test scores between control and experimental groups in EFL semantic awareness achievement. On the basis of the results of this study as revealed in Tables 1,2 and 3.

Regarding H1, it was showed that the experimental group, taught through a Program based on Self-regulation performed better than the control one in the post administration of EFL Semantic Awareness of Formal Language Secondary Schools Student since there was a statistically significant difference at (0, 05) between the mean scores of the experimental group and the control group in favor of the former.

As for H2, the participants progress in the post administration of EFL semantic awareness skills test could be attributed to the fact that while using a program based on self-regulation, students were interested in semantic awareness. students practiced various activities of EFL semantic awareness skills.

As for H3, it was showed that the experimental group outperformed the control group in the post administration of EFL semantic awareness Skills as a whole. The statistical results showed that there was a statistically significant difference between the mean scores of the experimental group in their performance of the posttest compared to the pre administration, favoring the post administration (Tables). The mean scores of the experimental group in the test are higher than that of the control one. Hence, the significant difference, shown on the post administration of the test, is due to exposing this group to a program based on self-regulation. Providing students with a variety of activities through this program, changing the method of teaching, dividing the roles among students to develop their EFL semantic awareness skills which gave them the opportunity to interact with each other and to react to the material presented to them.

In summary, the results of this research highlight that through this interaction, they created cooperative environment in which less emphasis was placed on transmitting information



from the teacher and more on the students. So, a program based on self-regulation adopted throughout the study helped the students go through several steps. Therefore, during the experimentation, it was noticed that the participants have a positive attitude towards the Program. For participants, the self-regulation activities changed the way they feel about EFL semantic awareness Skills. their enthusiasm and involvement and performance improved.

In this sense, there are three delimitations to this research. The first is linked to the research design itself specifically, the use of a questionnaire as a technique for identifying the targeted skills and sub-skills and a test to measure the differences between groups to be subject to bias. The second delimitation was the participants (sample type), sample size and age, since not considering other Egyptian schools makes it difficult to generalize the results of this study. Thirdly, academic year and activities.

Further studies should focus on the collection of other variables that may affect the learners needs, development and achievement.

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