

# Applying Flipped Learning Strategy to Develop EFL Students' Reading Comprehension Skills at the Faculty of Specific Education

<sup>1</sup>Neveen Hassan Mahmoud, <sup>2</sup>Fatima Sadek Mohamed, <sup>3</sup>Amr Fathy Abdel Wahab

## **Abstract**

*The purpose of the present study is to investigate the effect of applying a flipped learning strategy on developing reading comprehension skills among sophomores at the Faculty of Specific Education. The study adopted the one-group design, in which 30 students participated from second year, English section at the Faculty of Specific Education, Zagazig University during the academic year 2019/2020. They were instructed by applying the flipped learning strategy. To obtain data, two instruments were used: a pre-post reading comprehension skills test. Findings showed that the flipped learning strategy improved students' reading comprehension skills. Thus, it is recommended to utilize flipped learning as a new strategy in developing EFL students' reading comprehension skills.*

**Key words:** Flipped learning, reading comprehension

## **I. Introduction**

Reading comprehension is considered one of the main objectives of the reading process; or rather, it is the primary goal of reading. It depends on learners' knowledge and connecting what we do not know or new information to what we already have (Mohamed, Abdel-Haq and Helwa, 2010).

Serafini (2012, p.193) stated that reading comprehension is the process of generating viable interpretations within texts, and one's ability to construct understanding from different perspectives; including textual references, personal experiences, social-cultural and historical context, and the author's intentions. Baker, Gersten, and Grossen (2002) stated that there are four difficulties that face EFL learners in improving their reading comprehension skills. The first is related to the limitations in vocabulary and background knowledge. The second is related to the breakdowns in strategic processing of text and how well students monitor their understanding of what they are reading. The third is related to limitation in knowledge of how various types of

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<sup>1</sup>EFL researcher at the Faculty of Specific Education, Zagazig University, Egypt.

<sup>2</sup>Prof. of Curriculum and EFL Instruction, Faculty of Education, Benha University, Egypt.

<sup>3</sup>Lecturer of Curriculum and EFL Instruction Faculty of Specific Education, Zagazig University, Egypt.

texts are organized and structured. For example, many students cannot even realize the distinction between the standard organization of narrative texts versus the organization of expository texts. Finally, when much attention is allocated to low-level processes, as word recognition, not enough resources are available to accomplish the higher-order processing involved in comprehension.

Additionally this problem was proved by the results of the pilot study conducted by the researcher to assess the students' level. It was noted that the majority of the students were not able to infer the meaning between the lines. Moreover they could not reach comprehension beyond what is explicitly stated in the text. Thus, in order to overcome the problem, the current study suggested the use of flipped learning to develop reading comprehension skills and self-efficacy.

Al- Mamun (2014) pointed out that English language teachers are trying their best to get innovation to the class in order to create effective learning environments to overcome the difficulties learners face when learning the English language. To make the teaching-learning more interactive, different technological tools can be utilized, such as themultimedia tools, computers, mobile phone, audios and videos.Thus, it is clear that flipped learning is recommended for achieving the learning outcome by making the best use of both technology and face-to-face instruction. The use of technology, especially computers, e-learning and flipped learning in teaching foreign language, has spread fast as a reaction to some of the problems stemming from the use of traditional approaches in the foreign language classroom. Azizen (2010) assured that e-learning has become an important part of the teaching process and learning experience to both teachers and learners, as it helps teachers handle difficulties and limitations posed by the traditional classroom setting. It provides a variety of resource avenues and facilitates sharing information among educational communities.

Flipped classroom is a special form of blended learning. It occurs when a teacher sets notes, lectures, or website links online and students get in the classroom website to restore and view the information before going to school. Class time is for discussing information and carrying out activities (Strayer, 2012). A flipped classroom is an effective mode to engage students in active learning and in peer-to-peer and peer-to-teacher interactions during the learning process(Forsey, Low,& Glance, 2013; Pluta,Richards,&Mutnick,2013; Toe, Tan, Toe, &Yeo,2014).It is also a type of learning which rearranges how time is spent in and out of class to shift the learning process from the teacher to the student. Additionally, to create more effective use of class time, teachers need to adapt collaborative approaches in class for suiting the learning needs(The News Media Consortium, NMC, Horizon Report 2014).

### **Statement of the problem**

The problem of the current study could be stated in the poor performance of reading comprehension of EFL sophomore students enrolled in the English section at the Faculty of Specific Education, Zagazig University; therefore the present study was an attempt to develop the level of these students in reading comprehension skills by applying flipped learning strategy.

### **Questions of the study**

This problem could be formulated in the following questions:

- 1- What are the EFL reading comprehension skills needed for English section sophomores?

2- What are the features of the flipped learning strategy?

3- How can the flipped learning strategy be utilized to develop EFL sophomores' reading comprehension?

### **Purpose of the study**

This study aims at applying the flipped learning strategy to develop EFL reading comprehension skills among students at the Faculty of Specific Education.

### **Delimitations of the study**

The present study is delimited to:

- A group of thirty EFL sophomores at the faculty of Specific Education, Zagazig University.
- Some EFL reading comprehension skills related to the structural, literal, interpretative, inferential and evaluative levels which students were inefficient in.
- The second semester of the academic year 2019/2020.

## **II. Definitions of terms**

### **Reading comprehension**

AlMasi et al. (2010, p. 329) asserted that reading comprehension is the ability to decode and identify words as well as the ability to connect prior knowledge with text for building meaning. This definition indicates the relationship between decoding and comprehension. Although decoding is not sufficient by itself for facilitating understanding, it is important for readers during comprehension to integrate prior knowledge related to the text. Prior knowledge gives a framework which helps readers know more ideas about the content.

Alsmadani(2009) commented that reading comprehension is the amount of learning, information and meaning gained that readers are able to develop as reading. Reading comprehension is the capacity to understand and perceive the meaning communicated by text (Wilhem, 2006).

### **Flipped learning strategy**

Bergman and Sams (2014) viewed that flipped classroom is an approach that changes the traditional constructs of classroom and that is characterized by three components for a successful implementation: student-centred learning, optimized learning spaces and collaboration. Bishop and Verleger(2013) stated that flipped classroom is a student-centred learning process that consists of two parts: reactive learning activities in class and individual teaching based on online materials and activities.

### **The procedures of the study**

To answer the questions of the study, the following procedures were followed:

**1. Identifying the EFL reading comprehension skills required for English section sophomores through:**

- Reviewing literature and previous studies related to EFL reading comprehension skills.

- Preparing a list of EFL reading comprehension skills necessary for second year students.
- Submitting the EFL reading comprehension skills list to jury members to verify its validity.
- Modifying the list according to the jury members' opinions.

**2. Identifying the features of the flipped learning strategy to develop EFL students' reading comprehension skills among second year students at the Faculty of Specific Education through:**

- Reviewing literature and previous studies related to flipped learning.
- Selecting techniques, tasks, and activities included in the flipped learning strategy.
- Preparing the steps of the flipped classroom strategy to develop EFL reading comprehension skills.

**3. Identifying the effect of the flipped learning strategy on developing EFL reading comprehension skills through:**

- Preparing a pre-post EFL reading comprehension skills test and .
- Submitting the pre-post EFL reading comprehension skills test to the jury members to verify its validity.
- Modifying the test according to the jury members' opinions.
- Setting the test in its final form.
- Selecting the participants, one group, from second year English section at the Faculty of Specific Education.
- Administering the EFL reading comprehension pre-test to the study participants to determine their pre-level before teaching using the flipped learning strategy.
- Teaching the study participants using the flipped learning strategy.
- Administering the EFL reading comprehension skills post-test, to the participants, after applying the flipped learning strategy.
- Collecting and analyzing the data statistically.
- Interpreting the results.
- Presenting the recommendations and suggestions.

### **III. Results of the study**

The results of the presented study were presented in terms of the study hypotheses as follows:

#### **Findings of hypothesis one**

This hypothesis states that there is a statistically significant difference of experimental group students' score in the pre-post testing of reading comprehension skills. The level of significance is ( $\alpha \leq 0.05$ ). This significance is in the favor of the post testing. To test the first hypothesis, the researcher used t. test for the paired groups to identify the significance of difference between the mean scores of the pre-post testing of reading comprehension skills. The following table shows this.

**Table (3) Findings of the "t" test between the mean scores of the participants in the pre/ post test of reading comprehension skills**

Test	No.	Mean	Std.Deviation	t-value	DF	a.Sig	$\mu^2$
Pre	30	10.77	1.59	50.10	29	0.01	0.988
Post	30	19.87	1.38				

It is clear from this table that:

1. There is a statically significant difference between the mean scores of the study group in the pre-post reading comprehension test in favor of the post-test. The level of significance is 0.01. This indicated that the first hypothesis is assured and accepted.
2. The treatment effect size  $\mu^2$  on the reading comprehension is 0.998. It is a big value and suitable which indicates that a great percentage of differences is attributed to the experimental treatment in reading comprehension by using the flipped learning.
3. Figure (5) indicates the mean scores of the participants in the pre/post test of reading comprehension skills.

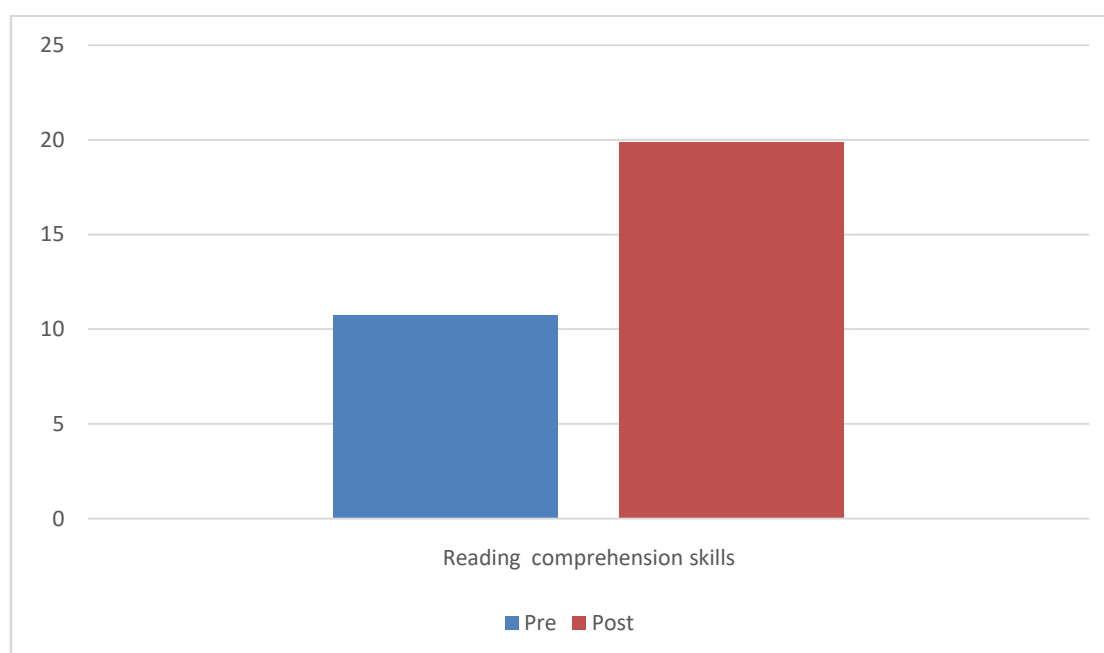


Figure (5) the mean scores of the participants in the pre/post test of reading comprehension skills

**Findings of hypothesis two:**

This hypothesis states that there is statistically significant difference between the mean scores of the study participants in the pre-post test in the reading comprehension skills test. This difference is significant at ( $\alpha \leq 0.05$ ) level. The significance is in favor of the post testing. To verify the hypothesis, the researcher used t-test for paired groups to determine the significance differences between the mean score of the group in the pre-post

testing. t.value was calculated and the effect size ( $\mu_2$ ) was also used to direct the differences of the paired sample. This is shown in table 4.

**Table (4) Results of t-test between the pre –post test in the reading comprehension skills**

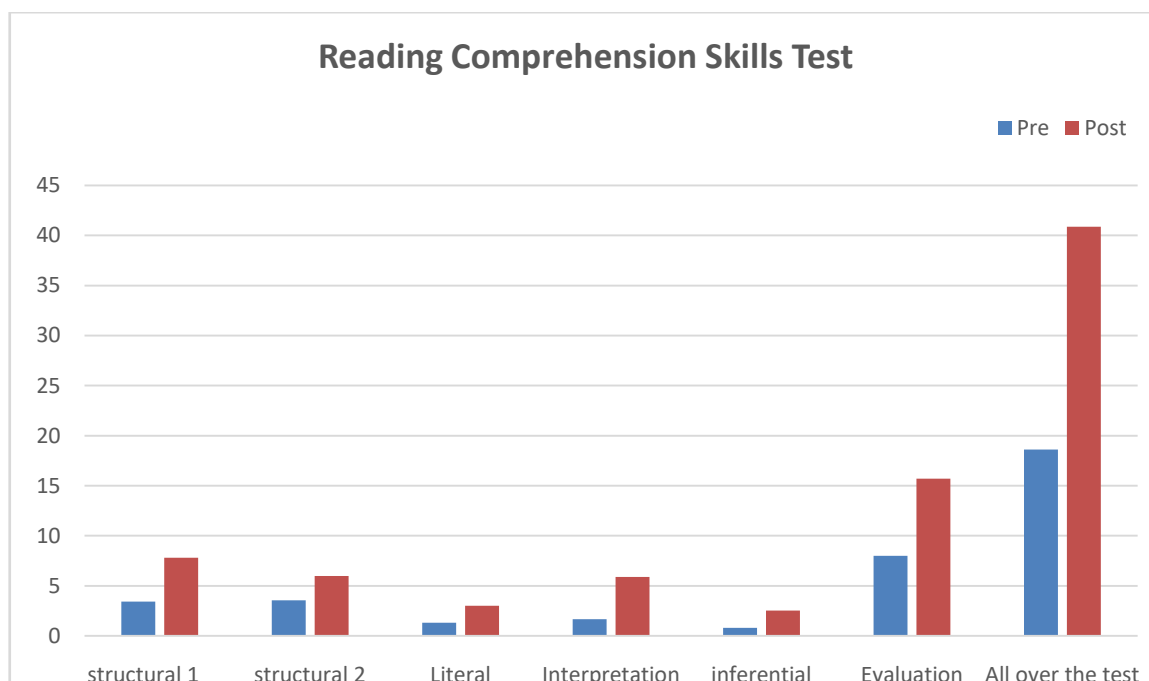
Skills	Test	No.	Mean	Std. Deviation	t-value	DF	a Sig	$\mu_2$
Structural	Pre	30	3.43	1.43	16.23	29	0.01	0.901
	Post	30	7.80	0.41				
Structural	Pre	30	3.55	1.06	11.97	29	0.01	0.832
	Post	30	5.97	0.19				
3	Literal	Pre	30	1.30	19.98	29	0.01	0.932
		Post	30	3.00				
	Interpretation	Pre	30	1.67	18.94	29	0.01	0.925
		Post	30	5.87				
	Inferential	Pre	30	0.80	11.47	29	0.01	0.819
		Post	30	2.53				
All over 3		Pre	30	3.77	28.84	29	0.01	0.966
		Post	30	11.40				
Evaluation	Pre	30	8.00	2.23	21.63	29	0.01	0.942
	Post	30	15.70	1.29				
All over the test	Pre	30	18.63	2.19	75.54	29	0.01	0.995
	Post	30	40.87	1.87				

Table 4 indicates that:

1. There is a statistically significant difference between the mean scores of the participants in the pre-post test of the reading comprehension skills as a whole. This level of significance is ( $\alpha \leq 0.01$ ). The significance is in the favor of the post testing.

2. 2. There is a statically significant difference between the main score of each skill in the test in the pre-post test. The significance is in favor of the post testing.

3. 3. The effect size of  $\mu_2$  on all reading comprehension skills ranged between (0.819- 0.995) .This is considered a big value and suitable one. It also indicates that a great portion of significance is attributed to the experimental treatment taught through the flipped learning. Figure (6) shows that.



**Figure (6) Results of t-test between the pre –post test in the reading comprehension skills**

**Findings of hypothesis three:**

This hypothesis states that there is a statically significant correlative coefficient between the mean scores of the participants in the post testing of reading comprehension skills.

The correlative coefficient was calculated using " Pearson Correlation" for post testing of the readingcomprehension . The following table shows this:

**Table ( 5 ) correlative coefficient between the mean scores of the participants in the post test of reading comprehension test.**

The variable	Correlation coefficient value	Significance
-Reading comprehension	0.851	0.01

It is clear from this table that:

1. There is a positive and significant correlation between the mean scores of the students in the post testing of reading comprehension. This means that the more the student scores were high in the reading comprehension.

2. The improvement in the students' scores in the test can be attributed to the use of the flipped learning.

### **Suggestions for further research**

In the light of the results and recommendations proposed in the current study, the following research topics are suggested:

1. Investigating the effect of using flipped learning on other language skills such as listening, speaking and writing at different stages.
2. Exploring the impact of flipped learning on the development of students' linguistics awareness such as phonological, morphological, syntactic and semantics.
3. Exploring the effect of flipped learning to enhance students' literary analysis skills.
4. Considering the effect of graphic organizers/ semantic mapping and improving reading comprehension skills.
5. Exploring the relationship between students' writing performance and reading comprehension skills.
8. In future research, it is vital to extend this type of research to include representative groups of students who differ in their phase of study, individual characteristics and learning content.
9. Also, it would be helpful to study the effects of flipped learning to enhance students' active learning and higher order thinking.
10. Another possible direction is to examine applying flipped learning from a qualitative perspective to gain a more- in-depth understanding on students' motivation, attitudes and engagement.

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