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A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

Dr. Laila Ismail Fahmy Hashem*

Abstract

The current study aimed at investigating the effectiveness of using the flipped learning model in developing EFL reading comprehension and self-regulated learning skills among EFL General Diploma in Education students. The participants were forty students. They represented one experimental group. Three main instruments were used for data collection: reading comprehension skills checklist, reading comprehension skills test and self-regulated learning skills scale. The students were taught using a proposed strategy based on flipped learning for twelve weeks. Data collected through the pre- and post-administration of the instruments was subjected to t-test. The results revealed through the post-administration of the reading comprehension test and the self-regulated learning scale displayed that the post-performance of the students significantly exceeded their pre-performance. Therefore, the results reflected support for the four study hypotheses. They proved the positive effect of the strategy on developing EFL reading comprehension and self-regulated learning skills among EFL General Diploma in Education students.

Keywords: strategy, flipped learning, reading comprehension, self-regulated learning, General Diploma in Education.
A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

استراتيجية قائمة على نموذج التعلم المقلوب لتنمية مهارات الفهم القرائي والتعلم المنظم ذاتياً لدى طلاب الدبلوم العامة في التربية تخصص اللغة الإنجليزية

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استهدفت الدراسة الحالية التعرف على أثر استخدام نموذج التعلم المقلوب في التدريس على تنمية مهارات الفهم القرائي باللغة الإنجليزية والتعلم المنظم ذاتياً لدى طلاب الدبلوم العامة في التربية تخصص اللغة الإنجليزية. وقد قامت الباحثة بنطبيق الاستراتيجية المقترحة على مجموعتين بحثيتين من طلاب الدبلوم العامة عدددهما أربعون طالباً وطالبة مثلوا المجموعة التجريبية. وقد قامت الدراسة باستخدام ثلاث أدوات لجمع البيانات هي: قائمة المهارات الفرعية للفهم القرائي واختبار مهارات الفهم القرائي ومقياس مهارات التعلم المنظم ذاتياً. وقد قامت الباحثة بنطبيق الاستراتيجية المقترحة في اثني عشر أسبوعاً، وتم معالجة البيانات التي تم جمعها من خلال التطبيق القبلي والبعدي للأدوات، وذلك عن طريق استخدام اختبارات الت، وقد اشارت النتائج إلى تحسين المجموعة التجريبية مستويًّا أفضل في الأداء في التطبيق البعدي للاختبار والمقياس عن التطبيق القبلي نفس المجموعة. وذلك، فقد أكّدت النتائج صحة فرضية الدراسة، وكذلك الأثر الإيجابي للاستراتيجية المقترحة على تنمية الفهم القرائي باللغة الإنجليزية وكذلك على تنمية التعلم المنظم ذاتياً لدى طلاب الدبلوم العامة في التربية تخصص اللغة الإنجليزية.

الكلمات المفتاحية للدراسة: استراتيجية، التعلم المقلوب، الفهم القرائي، التعلم المنظم ذاتياً، الدبلوم العامة في التربية.

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A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

1. Introduction

New approaches, strategies, and models to language teaching have always been the concern of teachers, curriculum planners, students, and parents as well. Since the emergence of modern technology, educational research has focused on whether face-to-face or online teaching can be more effective in teaching.

Recently, flipped learning was introduced as a new model to blended learning that could preserve classroom time by shifting the teaching content outside of the classroom. It was looked upon as one of the solutions that could help teachers save more time to observe their students' performance while practicing language skills. It required students to participate in activities and to become active learners. "The flipped classroom is a remedy for passive learning because it enables the students to participate and share their knowledge with their teachers and classmates" (Alhamami & Khan, 2019, p. 73).

Flipped Learning includes about 40% online independent learning that is conducted at home, followed by about 60% in-class learning (Afrilyasanti, Cahyono & Astuti, 2017, p. 476). It requires students to watch videos for screencasts of short lectures, complete readings and accomplish some quizzes or tasks. It also requires instructors to prepare or select, then upload short videos, PowerPoint presentations or screencasts, create online activities related to the screencast videos or readings watched, such as quizzes, and short answer questions that prepare students for individual, group or class discussions or presentations with the guidance of their instructor (Khalil, Fahim, 2016, p. 5 and Unal & Unal, 2017, p. 146).

Flipped Learning is one of the new trends in education that seeks to enhance student-centered instruction built on active learning and meaningful interactions and communication among students. It involves a combination of face to-face and online communication. It is also considered a pedagogical
model where conventional lecture and homework elements of a certain course are reversed (Alsowat, 2016, p. 108).

"The flipped classroom work can be categorised into three phases; namely pre-class learning preparation, in-class learning activities and post-class learning consolidation" (Kong, 2015, p. 17). In the first phase, learners go through the material at their own speed, learning what is being provided online. In the second phase, the learners and their teacher go through co-operative learning tasks by discussing, debating and presenting the content of the lesson in order to increase the learners' understanding. In the third phase, the learning outcomes are enhanced by practicing what has been learned and obtaining the teacher's feedback (Jdaitawi, 2019, p. 666).

Flipped Learning is based on Bloom's Taxonomy because the transmission of Knowledge—including the lower order thinking skills of the taxonomy namely: remembering, understanding and applying—is conducted independently by students at home. Whereas, the higher order thinking skills of the taxonomy; including: analyzing, synthesizing, evaluating, criticizing and creating take place in class with the teacher's guidance. The Constructivist Theory is also relevant to flipped learning. According to Constructivism, learners construct their knowledge through their previous experience, interaction and reflection. That is exactly what happens when using flipped learning in teaching (Al-Naabi, 2020, p. 65).

Flipped learning -as mentioned before- is considered a flexible learning model that enables students and teachers to preserve their time because the time spent in class will be devoted to discussions and activities rather than direct teaching. Consequently, it will increase the students’ involvement in the teaching -learning process. Moreover, flipped learning also combines other learning approaches as: the Project and Problem-Solving Approaches. The Co-operative Learning Approach is also included. Thus, flipped learning can actually provide students with high quality education as it utilizes various effective and well-known educational approaches (Milhem & Smadi; 2021, pp. 202-204).
One of the essential language skills that are connected with flipped learning is reading. Reading is one of the main language skills in EFL teaching and learning. It actually plays a vital role for successful functioning of EFL learners in the educational field. "Reading Comprehension is a complex process between identifying printed symbols and interpreting the meaning behind the symbols" (Sin & Siahpoosh 2020, p. 14). Therefore, successful readers need to link their prior knowledge with the text as a whole, identify details, draw conclusions and comprehend the meaning beyond what is written in the text (Kirmizi, 2010). A new model which is assumed to have a positive effect on reading comprehension in the language learning field is flipped learning.

Moreover, in order to carry out online and face-to-face learning activities together, students should have self-regulated learning skills (Shih & Huang, 2019). Flipped learning transfers the responsibility of learning from the teachers to the learners and directs learners to be active. In order to be active and acquire self-regulated skills, students have to go through three phases; in which they plan, monitor and evaluate their own learning. In the planning/forethought phase, students analyze the required task and identify its purpose. In the self-monitoring/performance phase, students use different strategies in order to complete the task. They sometimes need feedback from their teachers or peers while working on the task. In the self-reflection/assessment phase, students evaluate their performance in the task and their feelings about the strategies they used (Ozturk & Cakiroglu, 2021, pp. 3-4). Using the self-regulated learning skills strategies such as: goal-setting, self-efficacy, help-seeking, organizing, rehearsing, time-management and self-evaluation effectively assists EFL learning (Roohani & Asiabani, 2015, p. 32). Goal-setting strategy reveals students' goals and plans for relevant learning. Help-seeking strategy is for students to get assistance from the teacher or colleagues when needed. Organizing strategy is how to organize the course content in order to facilitate students' own learning. Rehearsing reveals the student's labour, training and repetition in order to learn a certain topic. Time-management strategy is concerned with organising the time assigned to complete a certain task. Self-evaluation strategy is concerned with the assessment of the student of his/her own learning. In this sense, the forethought phase takes place out of class, while performance and assessment phases generally take place in class (Cakiroglu & Ozturk, 2020, p. 24). Moreover, the previously mentioned strategies reflect
cognitive, metacognitive and behavioural dimensions. The cognitive dimension is reflected through organizing and rehearsing. The metacognitive dimension is revealed through goal-setting and self-evaluation. Whereas, the behavioural dimension is manifested through time-management and help-seeking (Ning & Downing, 2015).

According to all what has been previously mentioned, the researcher in the current research attempts to fill a crucial empty gap in the educational research by designing and applying a strategy based on flipped learning for developing reading comprehension and self-regulated learning skills among EFL General Diploma in education students at Cairo University.

1.1. Context of the Problem:

According to the researcher's long experience in teaching the EFL Methodology Course for EFL General Diploma students, she noticed weakness in some reading comprehension skills (e.g.: identifying essential details, making inferences and drawing conclusions), and self-regulated learning skills (e.g.: organizing, time-management and self-evaluation). Moreover, a pilot study was conducted by the researcher of the present research on the form of classroom observations. Evident problems concerning students' reading comprehension and self-regulated learning skills were perceived. In spite of being specialists in English language; about 40% of the students could not grasp the meanings correctly when they read the course texts about the global teaching approaches and related methods used in teaching English as a foreign language. Most of the students felt perplexed when they first read about a new approach.

Accordingly, they read the same topic many times in an attempt to understand the meaning beyond what was written even when the topics were prepared. This led to wasting the lecture time, and students gradually lost their self-confidence and motivation to learn, which in turn might even more negatively influence their reading comprehension and self-regulated learning skills.

The difficulties those student met in reading, and the recommendations of many relevant previous studies that tackled reading comprehension instruction and self-regulated learning (e.g.: Karimi & Hamzavi (2017), Ibnian (2018),
Alhamani & Khan (2019) and Sin & Siahpoosh (2020) urged the researcher of the present research to investigate the situation more deeply to develop an effective strategy to help EFL General Diploma students improve their reading comprehension and self-regulated learning skills. Consequently, flipped learning can be viewed as a new reliable model that could tackle EFL General Diploma students’ reading comprehension and self-regulated learning skills weaknesses.

1. 2. Statement of the Problem

The research problem could be identified in EFL General Diploma students’ poor mastery of the necessary EFL reading comprehension as well as self-regulated learning skills. This poor mastery was partly attributed to the regular methods of teaching reading that deprived students from their chance to develop their reading comprehension skills and acquire cognitive, metacognitive and behavioural strategies that can help them attain self-learning. Therefore, the current research attempted to answer the following main question:

**What is the effectiveness of a strategy based on the flipped learning model in developing EFL General Diploma students’ reading comprehension and self-regulated skills?**

Six questions were derived from the main question:

1. What are the EFL reading comprehension skills necessary for EFL General Diploma students?
2. To what extent do the students acquire these skills?
3. What are the theoretical bases of a strategy based on the flipped learning model for developing the reading comprehension skills of EFL General Diploma students?
4. What are the procedures of the strategy to be followed to develop EFL students' reading comprehension and self-regulated learning skills?
5. What is the effectiveness of the strategy in developing EFL General Diploma students’ overall and each reading comprehension skill?
6. What is the effectiveness of the strategy in developing EFL General Diploma students' overall and each self-regulated learning skill?
1. 3. Study Hypotheses

1. There is a statistically significant difference between the overall mean scores of the experimental group on the pre-and post-administration of the reading comprehension test in favour of the post-administration of the test.

2. There is a statistically significant difference between the mean scores of the experimental group on the pre- and post-administration of the reading comprehension test in favour of the post-administration of the test in each reading comprehension skill.

3. There is a statistically significant difference between the overall mean scores of the experimental group on the pre-and post-administration of the self-regulated learning scale in favour of the post-administration of the scale.

4. There is a statistically significant difference between the mean scores of the experimental group in the pre- and post-administration of the self-regulated learning scale in favour of the post-administration of the scale in each self-regulated learning skill.

1. 4. Study Purpose

The purpose of the current study is to investigate the effectiveness of a proposed strategy based on the flipped learning model in developing the reading comprehension and self-regulated learning skills of EFL General Diploma in Education students at Cairo University.

1. 5. Study Significance

- For EFL learners: the study can help learners develop their reading comprehension and self-regulated learning skills. In addition, it can raise students’ self-confidence and increase their motivation towards EFL language and methodology learning.

- For EFL teachers and staff members: they can benefit from the procedures of the proposed strategy based on the flipped learning model in teaching their students reading comprehension and other language skills.

- For curriculum planners: the study might help them implement the proposed strategy and other new technological strategies in teaching reading comprehension and other language skills.
• For other researchers: it paves the way for other studies to utilize new technological strategies in teaching the language skills at all school and university levels.

1. 6. Delimitations of the Study

1. A sample of 40 upper intermediate level postgraduate specialist students, Faculty of Graduate Studies for Education at Cairo University was assigned for the strategy application. These students were prepared to be EFL teachers in the future and hence they should have good command of English language skills including reading comprehension.

2. Eight reading comprehension skills (two literal, three inferential and three critical) were selected in the study according to the agreement of specialist jury members; namely: identifying the main idea, identifying essential details, guessing the meaning of unfamiliar words, making inferences, guessing evident cause-effect relationships, comparing and contrasting, distinguishing the writer’s attitude and drawing conclusions. Six self-regulation skills were selected according to the consensus of the related studies; namely: goal-setting, organizing, rehearsing, help-seeking, time-management and self-evaluation.

3. The strategy was implemented in teaching the EFL Methodology course during the second semester of the academic year: 2021-2022 (for three months, three hours per week). Students also had to attend a supplementary introductory session, the pre-post administration of a reading comprehension test and the pre-post administration of a self-regulation scale.

1. 7. Terminology

1. 7. 1. Strategy

Shehata and El-Nagar (2014, p. 39) defined strategy as a set of measures and practices teacher follows to reach certain outputs in the light of the assigned objectives. El-Wakeel and El-Mofty (2016, p. 341) defined it as a set of rules that are utilized to achieve certain objectives. Strategy is defined in the present research operationally as a set of procedures in accordance with the flipped
learning model, and followed by the instructor and students to develop students' reading comprehension and self-regulated learning skills.

1.7.2. Flipped Learning

Mohammadi, Barati & Youhanaee (2019, p. 102) defined flipped learning as an instructional model that can free the class time and prepare the students for communicative learning activities. Voss & Kostka (2019, p. 4) defined it as an approach where the instruction takes place before class. It is introduced to students through teacher prepared materials, such as video lectures. The introduced materials are then applied during class time. This shift in time and location is the cornerstone of flipped learning. Flipped learning is defined in the present research as an instructional model where students acquire knowledge at home by watching videos prepared by the researcher, then practise the language skills collaboratively in class, focusing on the reading comprehension skills.

1.7.3. Reading Comprehension

Sin & Siahpoosh (2020, p. 14) defined reading comprehension as a complex process that implies identifying printed symbols and interpreting the meaning behind these symbols. Samiei and Ebadi (2021, p. 1) defined it as a dynamic process that involves the recognition of written symbols, the understanding of the context beyond those symbols, and the realization of the connection between words and concepts. Reading comprehension in the current study refers to a dynamic process, through it EFL General Diploma students can grasp the main idea of a written text, find essential supporting details, guess the meaning of unfamiliar words, make inferences, guess cause-effect relationships, compare and contrast, distinguish the writer’s attitude and draw conclusions.

1.7.4. Self-Regulated Learning

Pintrich (2000, p. 453) defined self-regulated learning as a process where students are responsible for planning, monitoring and assessing their own learning as well as controlling their thinking, behaviour and other factors in their learning environment. Wolters (2011, p. 266) defined it as a process that assists students manage their own thoughts, behaviour and feelings in order to successfully direct their learning experiences. Self-regulated learning in the current research refers to a process where students manage their own learning in
three recurrent phases: the forethought phase, the performance phase and the self-reflection phase; using a number of strategies that help them complete the activities assigned to them.

2. Review of Literature and Related Studies
2.1. Flipped Learning

Flipped learning is a pedagogical model that reverses regular instruction and homework elements of a course. Instruction is presented outside the class and homework is transferred into the class. In the field of language acquisition, this shift can allow teachers and students to have more time needed for applying and practising the language skills.

Ahmad (2016) investigated the effect of using the flipped classroom model on the listening comprehension skills of thirty-four third year Egyptian EFL students at the Faculty Of Education, at Suez University. The findings revealed that the implementation of the model could enhance the listening comprehension skills of the students.

Alsowat (2016) studied the effect of the model on sixty-seven postgraduate students’ English higher-order thinking skills, engagement and satisfaction at Taif University. The Findings reflected statistically significant differences between the experimental and control groups in all variables in favour of the experimental group.

Braiek & Onaiba (2018) explored the effectiveness of the model on learning English as a foreign language and attitudes of thirty-one students towards flipped learning at Faculty of Arts, Misurata University. The results showed that the model had a significant effect on developing students’ performance in English Language and positive attitudes towards using the model in teaching.

Al-Naabi (2020) examined the effect of flipped learning on twenty-eight Omani EFL students' grammar and their perceptions in a flipped classroom at Arab Open University. The findings indicated that the model had a positive effect on learners' understanding and usage of grammar, and on their perceptions on the utility of the flipped classroom.
2.2. Reading comprehension

Reading comprehension plays a vital role in language learning and teaching. A great portion of the learning materials are presented to learners in a written form. Consequently, students should be able to read course related texts and understand them (Farahani, 2018, p. 79). Richards (2015, p. 453) pinpointed that most reading courses focus on enhancing some fundamental reading skills as: skimming, scanning and making inferences. On the other hand, Abdelhalim (2017, p. 38) introduced three main classifications to the reading comprehension skills: literal, inferential and critical comprehension.

Karimi & Hamzavi (2017) investigated the impact of the flipped learning model on sixty EFL students' reading comprehension skills and attitudes towards the model at a private language institute in Isfahan. The results revealed that the flipped learning model had a significant positive effect on students' reading comprehension skills and their attitudes towards the application of the model.

Ibnian (2018) examined the impact of using flipped learning on developing university students’ EFL reading comprehension, and students’ positive attitudes towards the use of the model. The sample consisted of seventy-two students enrolled in an English Communication skills course at the World Islamic Sciences and Education University in Amman. The results revealed that utilizing the model had a positive impact on the reading comprehension skills and attitudes of the experimental group.

Alhamami & Khan (2019) investigated the usefulness of flipped learning in a reading course of Level One students. The study also sought to reveal students’ attitudes and self-efficacy towards the model. Forty-three freshmen students in their first semester at King Khalid University in Abha participated in the study. The results showed obvious difference between the results of the experimental and control groups in their pre-and post-tests. However, the post-tests results in both treatments showed no significant difference. Higher positive attitudes and lower self-efficacy results were also shown by the experimental group. Accordingly, the researchers concluded that modern technology does not achieve more or less learning outcomes than the conventional strategies and that teacher plays a more important role than modern technology in developing students’ language proficiency including reading.
Sin & Siahpoosh (2020) explored the effect of flipped learning on reading comprehension of Iranian EFL students with different proficiency level; namely the elementary and intermediate levels. One hundred and twenty students were selected according to their performance on Oxford Placement Test. Then, a Nelson and The Preliminary English Test (PET reading test) were conducted for their homogeneity. The findings indicated that the experimental group displayed a better performance in the reading comprehension skills than the control group that was taught in traditional classrooms.

2.3. Self-regulated learning

Self-regulated learning has cognitive, metacognitive and behavioural dimensions. It has three phases: forethought, performance and self-reflection phases. A number of strategies are utilized by students in the three phases to develop their performance. The essential strategies that are used to develop students’ performance in EFL learning in all language skills are: goal-setting, planning, organizing, monitoring, rehearsing, notetaking, regulating, elaborating, help-seeking, time-management, testing and self-evaluation. (Cakiroglu & Ozturk, 2020, p. 25).

Abdelhalim (2018) investigated the effect of a proposed strategy based on the flipped model of instruction on developing first-year university students’ listening comprehension and self-regulation. The model was applied on fifty introductory-level English majors at Imam University, in Saudi Arabia. Results showed that the proposed strategy significantly developed listening comprehension and self-regulated learning skills among the experimental group students.

Cakiroglu & Ozturk (2020) proposed a model based on flipped learning and a number of self-regulated learning strategies to improve all language skills of university students in EFL courses. The selected strategies were: goal-setting, planning, rehearsing, help-seeking, monitoring, testing, time-management, organizing, regulating and note-taking. The researchers recommended using the proposed model in developing students’ all language skills in EFL courses and self-regulated learning skills as well.
In another study, Ozturk & Cakiroglu (2021) investigated the improvement of forty-nine students enrolled in an English Language course at a state university accounting department in Turkey in all language skills. While the experimental group received the course through the flipped model designed with self-regulated learning strategies, the control group did not use self-regulated learning strategies with the flipped model. The results displayed that self-regulated learning strategies positively affected the improvement of foreign language skills in a flipped classroom model. The experimental group performance exceeded the performance of the control group in speaking, reading, writing and grammar. However, no significant difference in listening was indicated.

2. 4. General comment on the related literature

To the best of the researcher’s knowledge, the current study is the first one in Egypt that investigates the effect of utilizing a strategy based on the flipped learning model in class on university postgraduate specialized students. Ahmad’s study (2016) and Abdelhalim’s study (2018) investigated the effect of utilizing the flipped learning model on the listening comprehension skills. Even the studies that investigated the effect of utilizing the flipped learning model on the reading comprehension skills of university students in other Arabian and foreign countries (e.g. Karami & Hamzavi (2017), Ibnian (2018), Alhamami (2019), Sin and Siahpoosh (2020)), linked the use of the flipped learning model with other dependent variables such as the students’ attitudes or their self-efficacy rather than their self-regulated learning skills.

Moreover, some factors that assist the effectiveness of utilizing the flipped learning model in the Egyptian context should be examined thoroughly by the researcher of the current study, such as the availability of students’ having enough access to technology at home, the inability of some students to take responsibility for their learning out of class and the suitability of the conditions in which the students watch the videos or read the materials at home.
3. Method

3.1. Design

The current study used both the analytical and quasi-experimental methods. It adopted the one group pre-post test experimental design. It is considered partially analytical because it included a theoretical framework that tackled flipped learning, reading comprehension and self-regulated learning, and partially experimental as it implemented a pre-post reading comprehension skills test and a pre-post self-regulated learning skills scale.

3.2. Participants

The participants were forty, upper intermediate English proficiency level postgraduate students who graduated in faculties of Arts, English Department. They were enrolled in the EFL General Diploma in Education, Faculty of Graduate Studies for Education at Cairo University in the second semester of the academic year 2021/2022. Students attended thirty-six hours in the semester (three hours per week) in an intensive EFL Methodology course studying new global teaching approaches to language teaching. Students’ age ranged from twenty-three and twenty-five years. It was expected that the EFL General Diploma in Education would qualify them to find jobs as teachers of English Language later on.

3.3. Instruments of the study

The present study used the following instruments:

3.3.1 The reading comprehension skills checklist:

Aim of the checklist

This checklist aimed at identifying the reading comprehension skills that should be acquired by General Diploma students.
**Description of the checklist**

The checklist was designed in the light of the university syllabus objectives of the EFL Methodology course assigned to EFL General Diploma in education students at Cairo University. The checklist was also based on reviewing the related studies (Richards (2015), Abdelhalim (2017), Karimi & Hamzavi (2017), Ibnian (2018), Alhamami & Khan (2019) and Sin & Siahpoosh (2020)).

**Validity of the checklist**

The initial form of the checklist included twelve reading comprehension skills. The checklist was examined by three specialist jury members in terms of the suitability of the skills to the students. Eight reading comprehension skills were selected, practised throughout the intervention of the study and assessed before and after the intervention. The selected reading comprehension skills were as follows:

(A) **Literal Comprehension: included:**

1. Identifying the main idea of a reading text.
2. Identifying essential details written in the text.

(B) **Inferential Comprehension: included:**

1. Guessing the meaning of unfamiliar words from the context.
2. Making inferences through analyzing the text.

(C) **Critical Comprehension: included:**

2. Distinguishing the writer's attitude.
3. Drawing conclusions.
3. 3. 2 The reading comprehension test:

Aim of the test

The test aimed at measuring the overall reading comprehension of EFL General Diploma students, and the eight assigned reading comprehension sub-skills related to each type of the three classified reading comprehension types; namely: literal, inferential and critical comprehension.

Description of the test

The final version of the test consisted of thirty-two items, in the form of four reading texts followed by objective questions. It was based on the test specifications (see appendix B) and the eight specified reading comprehension skills. Students had to read the four texts thoroughly, then answer three multiple-choice, three true or false and two fill in the gaps (one-word completion) items about each text. The texts were about English for Specific Purposes, Task-Based Language Teaching, the Multiple-Intelligences Theory and Cooperative Language Learning. The test was piloted on a group of twenty students, not participating in the experiment. Test duration was estimated by summing the times of the twenty students who answered the test, divided on their number.

Consequently, the time allotted for the test was two hours (see appendix C).

Test validity

Test content validity was proved by specialist jury members (three Curriculum and EFL Instruction staff members) in terms of appropriateness and suitability of test items. The test was adjusted according to the jury members' suggestions.

Test reliability

In order to ensure the test reliability, the test-retest method was applied on twenty students, with an interval of two weeks. The reliability coefficient was 0.82, which was considered relatively high.
Test scoring

The test was scored out of sixty-four marks, distributed as follows: zero for incorrect or left answers and two marks for each correct answer (see appendix C). Each Sub-skill was measured four times in the whole test. One time in each reading text.

3.3 Self-regulated learning scale

According to the consensus of the previously-mentioned related studies; e.g.: Cakiroglu & Ozturk (2020), (2021) & Abdelhalim (2018), self-regulation skills relevant to EFL learning, especially reading comprehension, fall almost under six main strategies; namely: goal-setting, organizing, rehearsing, help-seeking, time-management and self-evaluation.

Aim of the scale

The scale aimed at measuring participants' usage of the previously defined self-regulated learning skills in accomplishing reading comprehension tasks, and the extent to which the adopted intervention influenced those skills.

Description of the scale

According to the previously mentioned related studies, and the six defined self-regulated learning sub-skills, a twenty-four items scale was designed. Each four items measured one of the six self-regulated learning skills. All items were written in the positive form except items number three, five, twelve, fourteen, twenty and twenty-four that were written in the negative form for objectivity. The scale was written in a five-point Likert Scale form ranging from strongly disagree to strongly agree. The scale duration was estimated by summing the times that twenty students, other than the participants of the experiment, spent to answer the scale divided on their number. Consequently, the estimated time for answering the scale was thirty minutes.

Scale validity

A jury of three Curriculum and EFL Instruction and two Educational Psychology specialists examined the scale in terms of relevance of the scale items, suitability to the students and clarity of the scale instructions and items.
They modified the wording of some items and indicated the validity of the scale. The scale final form measured six strategies that comprised twenty-four items (see appendix D).

**Scale reliability**

To ensure the scale reliability, it was administered to a group of twenty General Diploma students, other than the participants of the experiment. The reliability coefficient was estimated using Cronbach Alpha Formula. The estimated value was 0.84 which was considered relatively high.

**Scale scoring**

The scale was a five-point Likert Scale. Participants were asked to write how much they agree with each item ranging from strongly disagree=1 to strongly agree=5 for positive items; and from strongly disagree=5 to strongly agree=1 for negative items. The final mark of the scale ranged between twenty-four and one hundred and twenty marks.

3. 4. The proposed strategy

3. 4. 1. Principles

This strategy underlines three main principles:

A. Students must come prepared by watching the assigned videos and answering the related reading comprehension questions before coming to class.

B. All students must participate in the class learning activities.

C. Students have to use their self-regulation skills in learning.

3. 4. 2. Aims

The proposed strategy was designed to:

A. Develop students’ reading comprehension skills (the eight assigned literal, inferential and critical reading comprehension skills).

B. Develop students’ ability to utilize a selection of six self-regulated learning skills.
3. 4. 3 Reading materials and teaching tools

The reading content and tasks were based on two main books for Richards and Rodgers (2014): Approaches and Methods in Language Teaching, and Richards (2015): Key Issues in Language Teaching. Both of the two books include authentic reading texts and tasks appropriate to teaching current approaches to language teaching; namely: Communicative Language Teaching, Task-Based Language Teaching, The Multiple Intelligences Theory and Cooperative Language Learning. The maximum length of the reading texts was two hundred words. The researcher implemented the selected reading texts in eight videos read and listened to through the Blackboard followed by related multiple-choice and true or false exercises. The videos were supposed to be watched and exercises answered before coming to class. In class, the researcher and students exchanged asking and answering questions, discussing related problems, clarifying difficult points and carrying out deeper and more complicated tasks. The whiteboard, data show and students' worksheets were used in that phase.

4. 4. 4. The procedures of the proposed strategy

3. 4. 4. 1. The introductory session

Before the intervention, the experimental group students were exposed to an overview of the assigned reading comprehension skills, their importance and how to develop them. They also were informed of the aims and procedures of the proposed strategy. Moreover, they were introduced to the self-regulated skills, their importance and how to develop them. The session lasted for three hours.

3. 4. 4. 2. Stages of the proposed strategy

Stage one: Before class stage (preparation)

Before Coming to class, students were expected to first read three texts about one of the new approaches to language teaching. The texts were downloaded on a video that was shown through the Blackboard. Students had the opportunity to read the assigned texts several times. Then, the instructor read the whole texts aloud. Reading the texts was preceded by a set of reading comprehension questions related to the main points of each text. Each text was also followed by
related multiple-choice and true or false questions asking about some evident details or vocabulary meaning. The questions were followed by their correct answers.

**Stage two: In class stage (active learning)**

The lecture session was divided into three steps, as follows:

**Step one:** the first thirty minutes of each lecture were devoted to revising the objectives of the lecture and giving a brief summary of the content of the assigned videos and the reading texts. Then, the instructor gave time for the students to ask questions, clarified some unclear points, and discussed some ambiguous ideas in the texts with the whole class.

**Step two:** students were provided with various activities. They spent about an hour working in pairs or groups in asking and answering open-ended questions focusing on inferring information through analyzing each text, and guessing cause-effect relationships. While students worked in pairs/small groups completing an assigned task, the instructor provided individual guidance to each pair/group as needed. Then, the whole class participated in answering the questions.

**Step three:** the instructor asked and encouraged her students in that step, which lasted for thirty minutes, to think deeper in order to answer questions, in pairs/small groups, focusing on extracting information beyond the direct meaning apparent in the texts as comparing and contrasting, reaching the writer's attitude and making a kind of judgement or conclusions extracted of each assigned text. Then, the whole class participated in answering the questions.

**Finally,** students participated in class discussions, for thirty minutes, about the new approach to EFL teaching they studied. Moreover, they discussed their own reading strategies that helped them comprehend certain parts of the reading texts or reaching the meaning beyond what was written in the assigned texts. The instructor spent other fifteen minutes illustrating to the class the common mistakes that were observed in their answers and how these mistakes could be avoided by utilizing self-regulated learning skills.
Stage three: After class stage (free practice)

The after class stage provided free practice of the acquired reading comprehension skills and the self-regulated learning skills. Every week, students were asked to prepare a new lesson plan in the light of the new assigned approach used in teaching EFL. The instructor encouraged them to use various reading sources on one of the related educational websites. Students wrote their lesson plans individually in their worksheets. Then, they handed them over to the instructor in order to read them and deliver her feedback by writing comments on the students’ work as a kind of formative evaluation. The stages and steps of the proposed strategy could be presented in the following figure.

Figure (1)

The Stages and Steps of the Proposed Strategy

1) Before Class (preparation)
   - Student reads the assigned texts.
   - Answering the guiding comprehension questions.
   - Answering the multiple-choice and true or false questions.
   - Checking the answers.

2) In Class (active learning)
   A. i) Revising the objectives.
      ii) Giving a brief summary of the content.
      iii) Asking questions, clarifying, discussing.
   B. i) Asking and answering open-ended questions.
      ii) Providing individual guidance to groups.
      iii) Participating in answering the questions.
   C. i) Asking and answering deeper questions.
      ii) Participating in answering the questions.
      iii) Class discussions.
      iv) Illustrating the common mistakes.

3) After Class (free practice)
   - Preparing a new lesson plan using various reading sources.
   - Receiving the lesson plans and evaluating them.
3. 4. 5. The used teaching methods

According to the procedures of the previously mentioned proposed strategy, the researcher used: lecturing, brainstorming, discussion, individual, pair and group work as teaching methods.

3. 4. 6. Assessment techniques

The assessment techniques used in this study were embodied in the worksheets comments as formative assessment, a pre-post reading comprehension skills test and a pre-post self-regulated learning skills scale as summative assessment. Thus, the researcher used both formative and summative assessment.

5. Data analysis and results

Data analysis and results would be discussed in the light of the study hypotheses. To test the first hypothesis, which stated: “There is a statistically significant difference between the overall mean scores of the experimental group on the pre- and post-administration of the reading comprehension test in favour of the post-administration of the test,” a paired sample t-test was applied. Table (1) shows means, standard deviation and t-value of the experimental group in the pre-and-post-reading comprehension test.

Table (1)

t-Test Results of Students’ Overall Performance on the Pre-vs. the Post-Administration of the Reading Comprehension Test

N = 40, DF = 39

<table>
<thead>
<tr>
<th>Skills</th>
<th>Application</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t-value</th>
<th>Sig. Level</th>
<th>Effect Size (n2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Pre</td>
<td>36.40</td>
<td>10.604</td>
<td>1.677</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>53.20</td>
<td>8.112</td>
<td>1.283</td>
<td>22.916</td>
<td>0.00</td>
<td>0.93</td>
</tr>
</tbody>
</table>

T-test proved that there was a statistically significant difference in the overall reading comprehension test result between the pre- and post-administration of the test on the experimental group. Thus, the calculated effect size indicated that the implemented strategy had a significant effect on the experimental group post reading comprehension performance on the overall
scores of the students. The total effect size of the test was (0.93) with a t-value (22.91). Thus, the first hypothesis was supported.

To test the second hypothesis which stated: “There is a statistically significant difference between the mean scores of the experimental group in the pre-and post-administration of the reading comprehension test in favour of the post-administration of the test in each reading comprehension skill”, a paired sample t-test was used. Table (2) shows means, standard deviations and t-values of the experimental group in the post-administration of the reading comprehension test.

Table (2)

T-Test Results of Students’ Performance on the Pre- vs the Post-Administration of the Reading Comprehension Test in Each Sub-skill

<table>
<thead>
<tr>
<th>Sub-skill</th>
<th>Application</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t-value</th>
<th>Sig. Level</th>
<th>Effect Size (n2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identifying the main idea</td>
<td>Pre</td>
<td>5.05</td>
<td>1.568</td>
<td>0.248</td>
<td>10.462</td>
<td>0.000</td>
<td>0.74</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>7.10</td>
<td>1.277</td>
<td>0.202</td>
<td>11.781</td>
<td>0.000</td>
<td>0.78</td>
</tr>
<tr>
<td>2. Identifying essential details</td>
<td>Pre</td>
<td>4.25</td>
<td>1.645</td>
<td>0.260</td>
<td>11.685</td>
<td>0.000</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>6.45</td>
<td>1.600</td>
<td>0.253</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Guessing the meaning of</td>
<td>Pre</td>
<td>4.65</td>
<td>1.833</td>
<td>0.290</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>unfamiliar words</td>
<td>Post</td>
<td>7.00</td>
<td>1.109</td>
<td>0.175</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Making inferences</td>
<td>Pre</td>
<td>3.70</td>
<td>1.400</td>
<td>0.221</td>
<td>16.312</td>
<td>0.000</td>
<td>0.87</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>5.85</td>
<td>1.388</td>
<td>0.219</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Guessing evident cause-effect</td>
<td>Pre</td>
<td>4.20</td>
<td>1.488</td>
<td>0.235</td>
<td>13.181</td>
<td>0.000</td>
<td>0.82</td>
</tr>
<tr>
<td>relationships</td>
<td>Post</td>
<td>6.30</td>
<td>1.067</td>
<td>0.169</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Comparing and contrasting</td>
<td>Pre</td>
<td>5.35</td>
<td>1.460</td>
<td>0.231</td>
<td>12.854</td>
<td>0.000</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>7.30</td>
<td>1.067</td>
<td>0.169</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Distinguishing the writer’s</td>
<td>Pre</td>
<td>5.65</td>
<td>1.494</td>
<td>0.236</td>
<td>11.473</td>
<td>0.000</td>
<td>0.77</td>
</tr>
<tr>
<td>attitude</td>
<td>Post</td>
<td>7.45</td>
<td>1.011</td>
<td>0.160</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Drawing conclusions</td>
<td>Pre</td>
<td>3.55</td>
<td>1.319</td>
<td>0.209</td>
<td>22.898</td>
<td>0.000</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>5.75</td>
<td>1.515</td>
<td>0.240</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 40, DF = 39

T- test results proved that there was a statistically significant difference in each assigned reading comprehension sub-skill. The calculated effect size indicated that the implemented strategy had a significant effect on the experimental group post-performance in each sub-skill. The largest effect size was for drawing conclusions (0.93) with a t-value (22.89). It was followed by making inferences
A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

(0.87) with a t-value (16.31). Then, comes guessing evident cause-effect relationships (0.82) with a t-value (13.18). Then, comparing and contrasting (0.81) with a t-value (12.85). After that, identifying essential details (0.78) with a t-value (11.78). The same effect size was for guessing the meaning of unfamiliar words (0.78) with a t-value (11.68). They were followed by distinguishing the writer’s attitude (0.77) with a t-value (11.47). The lowest effect size was for identifying the main idea (0.74) with a t-value (10.46). Consequently, the second hypothesis was supported.

For more illustration of the results of the pre-and post-administration of the reading comprehension test on the students’ performance, figure (2) was designed.

**Figure (2)**

The Results of the Pre- and Post-Administration of the Reading Comprehension Test on the Students’ Performance

![Graph showing the results of the pre- and post-administration of the reading comprehension test on the students’ performance.](image-url)
To test the third hypothesis which stated: “There is a statistically significant difference between the overall mean scores of the experimental group on the pre-and post-administration of the self-regulated learning scale in favour of the post-administration of the scale”, a paired sample t-test was used. Table (3) shows means, standard deviations and t-value of the experimental group on the pre-and post-administration of the scale.

Table (3)

*t-Test Results of Students’ Overall Performance on the Pre- Vs. the Post- Administration of the Self-Regulated Learning Scale*

<table>
<thead>
<tr>
<th>Skills</th>
<th>Application</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t-value</th>
<th>Sig. Level</th>
<th>Effect Size (n²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Pre</td>
<td>63.20</td>
<td>4.858</td>
<td>0.768</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>111.10</td>
<td>2.318</td>
<td>0.367</td>
<td>61.984</td>
<td>0.00</td>
<td>0.99</td>
</tr>
</tbody>
</table>

N = 40, DF = 39

T-test proved that there was a statistically significant difference in the overall self-regulated learning scale result between the pre-and post-administration of the scale on the experimental group. Consequently, the calculated effect size indicated that the implemented strategy had a significant effect on the experimental group post self-regulated learning performance as a whole. The total effect size of the scale was (0.99) with a t-value (61.98). So, the third hypothesis was proved.

To test the fourth hypothesis which stated: “There is a statistically significant difference between the mean scores of the experimental group on the pre-and post-administration of the self-regulated learning scale in favour of the post-administration of the scale in each self-regulated learning skill”, a paired sample t-test was used. Table (4) shows means, standard deviations and t-values of the experimental group in the pre-and post-administration of the self-regulated learning scale.
A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

Table (4)

T-Test Results of Students’ Overall Performance on the Pre- Vs. the Post-Administration of the Self-Regulated Learning Scale in Each Sub-skill

<table>
<thead>
<tr>
<th>Sub-skill</th>
<th>Application</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t-value</th>
<th>Sig. Level</th>
<th>Effect Size (n^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Goal-setting</td>
<td>Pre</td>
<td>10.78</td>
<td>1.888</td>
<td>0.298</td>
<td></td>
<td>22.923</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18.00</td>
<td>1.396</td>
<td>0.221</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Organizing</td>
<td>Pre</td>
<td>10.80</td>
<td>1.363</td>
<td>0.215</td>
<td></td>
<td>26.165</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18.15</td>
<td>0.864</td>
<td>0.137</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Rehearsing</td>
<td>Pre</td>
<td>10.70</td>
<td>1.043</td>
<td>0.165</td>
<td></td>
<td>38.892</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18.63</td>
<td>0.774</td>
<td>0.122</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Help-seeking</td>
<td>Pre</td>
<td>10.07</td>
<td>1.439</td>
<td>0.228</td>
<td></td>
<td>36.669</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18.45</td>
<td>0.639</td>
<td>0.101</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Time-management</td>
<td>Pre</td>
<td>9.90</td>
<td>1.236</td>
<td>0.195</td>
<td></td>
<td>45.634</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>19.02</td>
<td>0.832</td>
<td>0.131</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Self-evaluation</td>
<td>Pre</td>
<td>10.68</td>
<td>1.141</td>
<td>0.180</td>
<td></td>
<td>49.956</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18.85</td>
<td>0.921</td>
<td>0.146</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N = 40, DF = 39

T-test results proved that there was a statistically significant difference in each assigned self-regulation sub-skill. The calculated effect size indicated that the implemented strategy had a significant effect on the experimental group post-performance in each sub-skill. The largest effect size was for self-evaluation (0.98) with a t-value (49.95). The same effect size was for time-management (0.98) with a t-value (45.63). They were followed by rehearsing (0.97) with a t-value (38.89). Then comes help-seeking (0.97) with a t-value (36.66). After that, organizing (0.95) with a t-value (26.165). The lowest effect size was for goal-setting (0.93) with a t-value (22.92). Thus, the fourth hypothesis was proved.

For more elaboration of the results of the pre-and post-administration of the self-regulated learning scale on the students’ performance, figure (3) was designed.
A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

Figure (3)

The Results of the Pre- and Post-Administration of the Self-Regulated Learning Scale on the Students’ Performance

5. Discussion of Results

By reaching the above-mentioned results, the researcher could answer all the research questions raised. First, eight EFL reading comprehension skills necessary for EFL General Diploma students were identified. Second, the proposed strategy to be followed to develop EFL students’ reading comprehension and self-regulated learning skills was defined. Third, the effectiveness of the strategy in developing EFL General Diploma students’ overall and each reading comprehension skill was reached. Finally, the effectiveness of the strategy in developing EFL General Diploma students’ overall and each self-regulated learning skill was also attained.
Results of the study proved that the students’ post-performance significantly exceeded their pre-performance in overall reading comprehension as well as in each reading comprehension sub-skill. They also proved that the students’ post-performance significantly exceeded their pre-performance in overall self-regulation as well as in each self-regulated learning sub-skill.

Concerning reading comprehension, the students achieved obvious progress in the post-performance of their total reading comprehension, and in all the eight identified reading comprehension skills; namely: drawing conclusions, making inferences, guessing evident cause-effect relationships, comparing and contrasting, identifying essential details, guessing the meaning of unfamiliar words, distinguishing the writer’s attitude and identifying the main idea respectively than in their pre-performance. Identifying the main idea got the least effect size. This might be attributed to the students’ previous training and practice on identifying the main idea of any studied text in previous scholastic stages and levels. On the other hand, concerning self-regulated learning, the students also achieved remarkable progress in their post-performance in their total self-regulation, and in all the six specified self-regulated learning skills; namely: self-evaluation, time-management, rehearsing, help-seeking, organizing and goal-setting in the order already mentioned than in their pre-performance. Goal-setting got the least effect size. This might be attributed also to the same reason. Previous training and practice on goal-setting in previous scholastic stages and levels affected the result of that skill.

These results correspond with the results of other related studies for other researchers; namely: Karimi & Hamzavi (2017), Braiek & Onaiba (2018), Ibnian (2018) and Sin & Sinahpoosh (2020). The implementation of the flipped learning model in teaching could improve the reading comprehension sub-skills of the students. Using strategies based on modern technology achieved more learning outcomes than the conventional strategies that depend on the teacher’s predominant role in developing students’ language proficiency including reading comprehension.

However, the current study results proved to be inconsistent with the results of Alhamami & Khan (2019), whose study showed no significant difference between the experimental and control groups. Accordingly, the researchers concluded that modern technology does not achieve better learning
outcomes than the conventional strategies and that teachers still play more important roles than modern technology in developing students’ language proficiency.

The results of the present study are also in harmony with the results of other researchers; namely: Abdelhalim (2018), Cakiroglu & Ozturk (2020) and Ozturk & Cakiroglu (2021). The implementation of the flipped learning model in instruction could develop the self-regulated learning skills among the experimental group students. Moreover, Ozturk & Cakiroglu (2021) proved that focusing on utilizing self-regulated learning skills and strategies positively affected the improvement of students’ foreign language skills as well including listening, speaking, reading and writing. Consequently, both researchers could prove the correlation between the development of self-regulated learning skills and foreign language skills.

According to the previous discussion, technology proved to enhance language learning and teaching in general, and reading comprehension and self-regulated learning in particular. It provides students with many executive facilities and indispensable opportunities for meaningful communication. It also engages students more in the learning process both inside and outside the classroom. Moreover, it helps in creating rich encouraging environments that motivate students to manage their learning time successfully, follow certain well-organized boosting procedures and bear a considerable part of the responsibility of their own learning.

6. Recommendations

In the light of the results of the current research, the following recommendations are suggested:

1. Incorporating the flipped learning model should be encouraged at all language learning stages as it supports active, co-operative and autonomous learning and ongoing formative assessment.
2. Teachers and instructors should be encouraged to reduce face-to-face learning and pay more attention to utilizing new teaching strategies based on technology, such as flipped instruction.
3. Through flipped instruction, EFL teachers and instructors should do their best to provide students with enough practices on each language skill.
4. More attention should be paid to provide teachers with both pre-service and in-service training on using the flipped learning model in teaching English as a foreign language.

7. Suggestions

Based on the results and recommendations of the current research, the following suggestions are presented for further research:

1. Investigating the impact of the flipped model on speaking, listening and writing skills in the Egyptian context at different language proficiency levels, especially higher education.
2. Studying the impact of the flipped model on reading comprehension in the Egyptian context at different language proficiency levels.
3. Conducting more qualitative studies to explore the effect of the flipped model of instruction on learners’ attitudes and self-efficacy.
4. Further research should investigate different related variables that may affect the success of flipped instruction in language learning, such as students’ aptitude and their learning styles.

References


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Appendices

Appendix (A)

The Final Form of the Reading Comprehension Skills Checklist

A] Literal Comprehension:

1) Identifying the main idea of a reading text.

2) Identifying essential details written in the text.

B] Inferential Comprehension:

1) Guessing the meaning of unfamiliar words from the context.

2) Making inferences through analyzing the text.

3) Guessing evident cause-effect relationships.

C] Critical Comprehension:

1) Comparing and contrasting.

2) Distinguishing the writer’s attitude.

3) Drawing conclusions.
## Appendix (B)

### The Test Specifications

<table>
<thead>
<tr>
<th>Category</th>
<th>Reading Comprehension Skills</th>
<th>Text</th>
<th>Question Type</th>
<th>Number of Items for each skill</th>
<th>Scores assigned to each skill</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M.C.Q</td>
<td>True or False</td>
<td>Completion</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Literal Comprehension</strong></td>
<td>1. Identifying the main idea.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2. Identifying essential details.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>Inferential Comprehension</strong></td>
<td>1. Guessing the meaning of unfamiliar words.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2. Making inferences.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>3. Guessing cause-effect relationships.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>Critical Comprehension</strong></td>
<td>1. Comparing and contracting.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>#</td>
</tr>
<tr>
<td></td>
<td>2. Distinguishing the writer's attitude.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>#</td>
</tr>
<tr>
<td></td>
<td>3. Drawing conclusions.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>#</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>12</td>
<td>12</td>
<td>#</td>
<td>64</td>
</tr>
</tbody>
</table>
Appendix (C)

The Reading Comprehension Test

Name:......................

Time: Two hours.

Total Mark: 64.

Read the following texts thoroughly, then answer the questions:

Text (1)

Advocates of CLT recognized that many learners needed English in order to use it in specific occupational or educational settings – they needed English for Specific Purposes (ESP). For such learners it would be more efficient to teach them the specific kinds of language and communicative skills needed for particular roles (e.g., that of nurse, engineer, flight attendant, pilot, biologist, etc.) rather than just to concentrate on more and more general English. This led to the process of needs analysis, the use of observation, surveys, interviews, situation analysis, analysis of language samples collected in different settings – in order to determine the kinds of communication learners would need to master if they were in specific occupational or educational roles and the language features of particular settings. The focus of needs analysis was to determine the particular characteristics of a language when it is used for specific rather than general purposes. Such differences might include differences in vocabulary choice, grammar, kinds of texts commonly occurring, functions and the need for particular skills.

1] Choose the correct answer:

1. The main topic in the text is .........................

a) the Communicative Approach.

b) English for Specific Purposes Approach.

c) the process of needs analysis.

d) the characteristics of a language used for specific purposes.
2. The process of needs analysis requires using ……………………
a) observation sheets.
b) situation analysis.
c) analysis of language samples.
d) all the above-mentioned tools.
3. Efficient means ……………………………
a) incompetent.
b) effective.
c) disorganized.
d) systematic.

2] Write (√) for true sentences, and (X) for false ones:
1. Learning general English is efficient for an engineer to carry on his job. ( )
2. Practicing particular jobs in the future requires learning specific vocabulary. ( )
3. Flight attendants need to master the speaking skill, while biologists need to master the writing skill more. ( )

3] Fill in the gaps:
1. The writer of the text ………………… utilizing English for Specific Purposes for some educational and occupational intentions.
2. English for Specific Purposes is considered a new …………… approach to language learning and teaching.

Text (2)
A number of specific roles for learners are assumed in current proposals for TBLT. Some of these overlap with the general roles assumed for learners in
Communicative Language Teaching, while others are created by the focus on task completion as a central focusing activity. Primary roles that are implied by task work are:

- **Group participant.** Many tasks will be done in pairs or small groups. For students more accustomed to whole-class and/or individual work, this may require some adaptation.

- **Monitor.** In TBLT, tasks are not employed for their own sake but as a means of facilitating learning or as a rehearsal for real-world tasks. Class activities have to be designed so that students have the opportunity to notice how language is used in communication. Learners themselves need to “attend” not only to the message in task work, but also to the form in which such messages typically come packed. Therefore, a learner acts as a “monitor”, paying attention to form during the activity.

- **Risk-taker.** Many tasks will require learners to create and interpret messages for which they lack full linguistic resources and prior experience. In fact, this is said to be the point of such tasks. Practice in restating, paraphrasing, using paralinguistic signals, such as pitch, volume, or intonation (where appropriate), and so on, will often be needed. The skills of guessing from linguistic and contextual clues, asking for clarification, and consulting with other learners may also need to be developed.

1] **Choose the correct answer:**

1. The main issue in the text is ……………………

a) the Communicative Approach.

b) learner roles in the learning-teaching process.

c) learner roles in Task-Based Language Teaching.

d) the learner as a risk-taker.

2. Activities should be designed so that students have the opportunity to …………… how language is used in communication.

a) guess.
b) create.

c) assume.

d) monitor.

3. Rehearsal means …………………….

a) observation.

b) practice.

c) adaptation.

d) creation.

2] Write (✓) for true sentences, and (X) for false ones:

1. According to Task-Based Language Teaching, the learner is responsible for his/her learning. (    )

2. When students lack full linguistic skills and prior experience, guessing from some clues need to be developed. (    )

3. Students accustomed to whole/individual classwork are usually more adjustable to pair/small group classwork than others. (    )

3] Fill in the gaps:

1. The writer of the text ……………. that Task-Based Language Teaching carries many serious roles for the learner.

2. Task-Based Language Teaching is one of the ……………… approaches that is built on active learning.

Text (3)

Gardner (1993) proposed a view of natural human talents that he called the “Multiple Intelligences Model.” He originally posited eight native “intelligences,” which are described as follows:
1. **Linguistic:** the ability to use language in special and creative ways, which is something lawyers, writers, editors and interpreters are strong in.

2. **Logical / mathematical:** the ability to think rationally, often found with doctors, engineers, programmers, and scientists.

3. **Spatial:** the ability to form mental models of the world, something architects, decorators, sculptors, and painters are good at.

4. **Musical:** having a good ear for music, as is strong in singers and composers.

5. **Bodily/kinesthetic:** having a well-coordinated body, something found in athletes and crafts persons.

6. **Interpersonal:** the ability to be able to work well with people, which is strong in salespeople, politicians, and teachers.

7. **Intrapersonal:** the ability to understand oneself and apply one’s talent successfully, which leads to happy and well-adjusted people in all areas of life.

8. **Naturalist:** the ability to understand and organize the patterns of nature.

He later suggested a ninth intelligence – existential intelligence – “a concern with philosophical issues such as the status of mankind in relation to universal existence.”

1] **Choose the correct answer:**

1. The main topic in the text is ……………………………

   a) The Intelligent IQ testing Model.

   b) The Linguistic Intelligence.

   c) The Multiple Intelligences Model.

   d) The Existential Intelligence.

2. Lawyers, writers, editors and interpreters are strong in …………………………

   a) Mathematical intelligence.
b) Musical intelligence.

c) Intrapersonal Intelligence.

d) Linguistic Intelligence.

3. Craftspersons means ………………..

a) architects.

b) skilled workers.

c) sculptors.

d) painters.

2] Write (√) for true sentences, and (X) for false ones:

1. The Multiple Intelligences Model acknowledges the individual differences among learners. (  )

2. The ability to understand oneself and apply one’s talent may hinder his/her success in life. (  )

3. Language teachers should obtain linguistic intelligence, while Maths teachers should obtain logical intelligence. (  )

3] Fill in the gaps:

1. The writer of the text is ……………….. that the human brain has many important types of intelligence rather than the linguistic and logical ones.

2. According to Gardner, people ……………….. in the strengths and combinations of the different types of intelligence.

Text (4)

The role of teacher in CLL differs considerably from the role of teachers in traditional teacher-fronted lessons. The teacher has to create a highly structured and well-organized learning environment in the classroom, setting goals, planning and structuring tasks, establishing the physical arrangement of the
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classroom, assigning students to groups and roles, and selecting materials and time. An important role for the teacher is that of facilitator of learning. In his or her role as facilitator, the teacher must move around the class helping students and groups as needs arise.

Teachers speak less than in teacher-fronted classes. They provide broad questions to challenge thinking, they prepare students for the tasks they will carry out, they assist students with the learning tasks, and they give few commands, imposing less disciplinary control. The teacher may also have the task of restructuring lessons so that students can work on them cooperatively.

1] Choose the correct answer:

1. The main concept in the text is ………………………
   a) Cooperative Language Learning.
   b) Teacher roles in Cooperative Language Learning.
   c) The teacher as a facilitator of learning.
   d) Teachers’ steps to help students work cooperatively.

2. To be a …………………., teacher must move around the class helping students as needs arise.
   a) facilitator.
   b) planner.
   c) class-organizer.
   d) resources-supplier.

3. Structuring tasks means ………………………
   a) imposing.
   b) extending.
   c) arranging.
d) selecting.

2] Write (√) for true sentences, and (X) for false ones:

1. The teacher has multi-dimensional roles in Cooperative Language learning. (√)

2. Teachers impose more disciplinary control because they assist students with their learning tasks most of the time. (√)

3. Traditional teacher-fronted classes speak more than the teacher who adopts Cooperative Language Learning. (√)

3] Fill in the gaps:

1. The writer of the text …………………. the new roles of the teacher in Cooperative Language Learning.

2. Cooperative Language Learning is a …………………. language teaching approach in all its stages.

Good Luck.

The Researcher
Appendix (D)

The Self-Regulated Learning Scale

Name:............

Time: 30 minutes.

Mark: ..............

Dear student: Read the items thoroughly, then select the best answers:

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Uncertain</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flipped learning allowed me identify the topic goal and the purpose for learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>It made it easier for me to comprehend the reading text.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I feel that flipped learning did not assist me to learn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>The videos helped me learn and plan for relevant learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>After watching the video, I could not understand nor express its main idea.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>I think that the videos assisted me distinguish the important parts of the text.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Flipped learning helped me organize the course content.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Through organizing the content, my own learning was facilitated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Flipped learning allowed me repeat reading a text for many times.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>A lot of labour, practice and training were done when I utilized flipped learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I felt more engaged in this learning than in other traditional methods.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A Strategy Based on the Flipped Learning Model to Develop Reading Comprehension and Self-Regulated Learning Skills among EFL General Diploma in Education Students

Thank you for your co-operation,

The Researcher.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>I think the online videos were unsuccessful in helping me learn.</td>
</tr>
<tr>
<td>13</td>
<td>Flipped instruction encouraged me seek help from my classmates.</td>
</tr>
<tr>
<td>14</td>
<td>Flipped instruction discouraged me ask for clarifications from my instructor.</td>
</tr>
<tr>
<td>15</td>
<td>I believe the course offered me a valuable opportunity to learn from new sources of knowledge.</td>
</tr>
<tr>
<td>16</td>
<td>Collaboration in class among all participants helped me increase my knowledge.</td>
</tr>
<tr>
<td>17</td>
<td>I had more time to apply what I learnt in a flipped class.</td>
</tr>
<tr>
<td>18</td>
<td>Classroom time was utilized effectively in the flipped class.</td>
</tr>
<tr>
<td>19</td>
<td>I had more opportunity than before to communicate with other students.</td>
</tr>
<tr>
<td>20</td>
<td>It is uncomfortable to spend all that time watching a video at home, then discussing it in class.</td>
</tr>
<tr>
<td>21</td>
<td>Activities and quizzes encouraged me to watch videos before coming to class.</td>
</tr>
<tr>
<td>22</td>
<td>Discussions increased my understanding of the course content.</td>
</tr>
<tr>
<td>23</td>
<td>Test results helped me evaluate my own performance.</td>
</tr>
<tr>
<td>24</td>
<td>Flipped learning did not help me develop my linguistic performance.</td>
</tr>
</tbody>
</table>