



UNIVERSIDAD TÉCNICA DE AMBATO

FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

**CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y
EXTRANJEROS**

**Proyecto de Trabajo de Graduación o Titulación previo a la obtención del
Título de Licenciada en Pedagogía del Idioma Inglés.**

Theme:

“FLIPPED CLASSROOM AND THE READING COMPREHENSION”

Author: Castro Altamirano Carla Sofía

Tutor: Mg. Suárez Mosquera Wilma Elizabeth

Ambato – Ecuador

2022

TUTOR APPROVAL

CERTIFY:

I, Mg. Wilma Elizabeth Suárez Mosquera holder of the I.D No. 1802859841, in my capacity as supervisor of the Research dissertation on the topic: **“FLIPPED CLASSROOM AND THE READING COMPREHENSION”** investigated by Carla Sofía Castro Altamirano with I.D No. 1805404835 confirm that this research report meets the technical, scientific, and regulatory requirements, so the presentation of it is authorized to the corresponding organism in order to be submitted for evaluation by the Qualifying Commission appointed by the Directors Board.

.....
Mg. Wilma Elizabeth Suárez Mosquera

C.C. 1802859841

DECLARATION PAGE

I declare this undergraduate dissertation entitled "**FLIPPED CLASSROOM AND THE READING COMPREHENSION**" is the result of the author's investigation and has reached the conclusions and recommendations described in the present study.

Comments expressed in this report are the author's responsibility.



.....
Carla Sofía Castro Altamirano

1805404835

AUTHOR

BOARD OF EXAMINERS APPROVAL

The Board of Directors which has received the defense of the research dissertation with the purpose of obtaining the academic degree with the topic "FLIPPED CLASSROOM AND THE READING COMPREHENSION" which is held by Carla Sofia Castro Altamirano undergraduate student from Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, academic period October 2021 – March 2022, and once the research has been reviewed, it is approved because it complies with the basic, technical, scientific and regulatory principles.

Therefore, the presentation before the pertinent organisms is authorized.

Ambato, March 2022

REVISION COMMISSION

Mg. Ximena Alexandra Calero Sánchez

REVISER

Mg. Lorena Fernanda Parra Gavilanez

REVISER

COPYRIGHT REUSE

I, Carla Sofía Castro Altamirano with I.D. No. 1805404835, confer the rights of this undergraduate dissertation "flipped classroom and the reading comprehension ", and authorize its total reproduction or part of it, as long as it is in accordance with the regulations of the Universidad Técnica de Ambato, without any kind of profit from it.



.....
Carla Sofía Castro Altamirano

1805404835

AUTHOR

DEDICATION

TO:

God for giving me the strength and ability to keep going day by day and guide me on the path of good, my parents Carlos and Irene. To my brother Sebastian as the fundamental pillars, because without their support and advice I could never have achieved what I have achieved so far in my life.

To my husband Jonathan and my son Mathias for never leaving me alone on this long road and being the reason to be better every day

Sofia.

ACKNOWLEDGMENTS

First, to God for all that I have received and for making this day possible.

To my parents for being always my moral and economic support without any condition whatsoever.

To my grandfather in heaven for always being my inspiration. To my grandmother for being my friend and mother as well, for her good advice and example.

To my brother for being the most unconditional person I have and for never leaving me alone.

To my husband and my son for being my reason for making this day possible.

To my teachers, for their teachings and transmit their knowledge.

Sofía.

TABLE OF CONTENTS

TUTOR APPROVAL	ii
DECLARATION PAGE.....	iii
BOARD OF EXAMINERS APPROVAL.....	iv
COPYRIGHT REUSE.....	v
DEDICATION.....	vi
ACKNOWLEDGMENTS.....	vii
CHAPTER I.....	12
THEORETICAL FRAMEWORK.....	12
1.1 Investigative background	12
1.2 Technical – scientific foundation	16
1.3 Objectives	21
1.4 Description of the fulfillment objectives	21
CHAPTER II.....	22
METHODOLOGY	22
2.1 Resources	22
2.1.1 Population	22
2.1.2 Instruments.....	22
2.1.3 Materials	22
2.1.4 Procedure	23
2.2 Methods	24
CHAPTER III.....	26
RESULTS AND DISCUSSION	26
3.1 Analysis and discussion of the method.....	26
3.3 Hypothesis verification	31
3.4 Discussion.....	33
CHAPTER IV.....	32
CONCLUSIONS AND RECOMMENDATIONS	32
4.1 Conclusions.....	32
4.2 Recommendations.....	33
Reference list	34
ANNEXES.....	37
Annex 1: Lesson plans	37
Annexes 2: Test.....	42
Annex 3: Tools used for flipped classroom.....	51
Annex 4: Extra activities.....	51
Annex 5: Pictures	53
Annex 6: Urkund report.....	56

INDEX OF TABLES

Table 1: Pre-test results	26
Table 2: Post-test	27
Table 3: Pre-test and post-test average and difference	29
Table 4: T-student-Paired Samples Statistics.....	30
Table 5: Paired Sample Test	31

INDEX OF FIGURES

Figure 1: results pre-test and post-test over 10	28
Figure 2: Average scores pre-test and post-test	29

UNIVERSIDAD TÉCNICA DE AMBATO
FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN
CARRERA DE PEGAGOGÍA DE LOS IDIOMAS NACIONALES Y
EXTRANJEROS

TOPIC: “FLIPPED CLASSROOM AND THE READING COMPREHENSION”

AUTHOR: Carla Sofía Castro Altamirano

TUTOR: Mg. Wilma Elizabeth Suárez Mosquera

Abstract

Education evolves according to the advances in technology and students and teachers must adapt to new ways of teaching. One of the best teaching approaches in virtual and face-to-face modalities is the flipped classroom. The aim of this research was to determine the benefits of using the flipped classroom in teaching reading skills. This study was a quasi-experimental research with 8 participants, second-year high school students of the Unidad Educativa "Nueva Era". The investigation was in face-to-face modality. It lasted 5 sessions at the high school. Students took a pre-test and a post-test designed by Cambridge. The data obtained were analyzed using the T-student. Finally, the results showed that the use of the flipped classroom in the group of students of the Unidad Educativa "Nueva Era" had good results in the reading tests taken.

Keywords: approach, teaching, virtual, technology, reading

UNIVERSIDAD TÉCNICA DE AMBATO
FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN
CARRERA DE PEGAGOGÍA DE LOS IDIOMAS NACIONALES Y
EXTRANJEROS

TOPIC: “FLIPPED CLASSROOM AND THE READING COMPREHENSION”

AUTHOR: Carla Sofía Castro Altamirano

TUTOR: Mg. Wilma Elizabeth Suárez Mosquera

Resumen

La educación evoluciona de acuerdo con los avances de la tecnología y los estudiantes y docentes deben adaptarse a las nuevas formas de enseñar. Uno de los mejores enfoques de enseñanza en las modalidades virtual y presencial es el aula invertida. El objetivo de esta investigación fue determinar los beneficios del uso del aula invertida en la enseñanza de habilidades de lectura. Este estudio fue una investigación cuasi-experimental con 8 participantes, estudiantes de segundo año de secundaria de la Unidad Educativa “Nueva Era”. La investigación fue en modalidad presencial. Duró 5 sesiones en el instituto. Los estudiantes realizaron un pre-test y un post-test diseñado por Cambridge. Los datos obtenidos se analizaron mediante la T-student. Finalmente, los resultados mostraron que el uso del aula invertida en el grupo de estudiantes de la Unidad Educativa “Nueva Era” tuvo buenos resultados en las pruebas de lectura realizadas.

Palabras clave: enfoque, enseñanza, virtual, tecnología, lectura

CHAPTER I

THEORETICAL FRAMEWORK

1.1 Investigative background

This study involves the use of technology to teach English using the flipped classroom approach to analyze the benefits in reading comprehension. This teaching approach has been used in online or face-to-face teaching. Flipped classroom allowed students to learn everything that teacher wants to share because the information is free, and it was uploaded on a platform and students must check it and they learn by themselves.

Fong and Hoon (2020) led an investigation which aimed to promote the Chinese reading comprehension learning process using the SQ3R strategy in the flipped classroom teaching model. This study was developed with a quantitative design because the data collection was obtained from the respondents using a questionnaire and structured interview. The population was 118 students from three different primary schools in the Klang district. The results showed that in two primary schools the strategy applied gives an improvement on the reading comprehension in 87% of the total and the other primary school students improved their reading comprehension by 62% in total.

Fahmi, Friati, and Iriati (2020) conducted a study that had the objective to investigate the teacher's way of implementing flipped classroom in teaching reading narrative text and reveal students' perception toward the teaching model. This study was a quantitative case. The population of this study was twenty-three students from the tenth grade and one English teacher in one of the vocational high schools in Cilacap, Indonesia. The result of the study showed that the teacher implemented four main stages in teaching reading narrative text using the flipped classroom model. Meanwhile, students viewed that flipped classroom as a fun learning model, which helped them become more active learners, and help them overcome their shortcomings.

Hasanah and Arifani (2020) led a study whose main objective was to know the effect of the flipped classroom using video linked in telegram App toward ESP students reading comprehension. Checking the methodology this was a quasi-experimental study because in this investigation was applied a pre-test and a post-test showed significantly effective results for enhancing ESP students reading comprehension. The participants were 49 ESP students of accounting class in English program was engaged in treatment group while 37 students of informatics engineering class received only traditional teaching.

Karimi and Hamzav (2017) carried out a study that was aimed at investigating the effect of the flipped model of instruction on EFL learners' reading comprehension ability. This was a quasi-experimental study in which was applied a pre-test and a post-test. The participants for this study were 50 students from 19 to 25 years old, these 50 students were divided into two groups, a control group, and an experimental group. The experimental group received flipped classes and the control group received traditional classes. Finally, the results of frequency analysis indicated that EFL students in the experimental group said that this approach was helpful for them to learn a topic.

Chavangklang and Suppatseree (2020) directed an investigation the differences between reading comprehension of students learning with the flipped classroom approach and the traditional method. This study was applied a quasi-experimental design also, there were two groups, the control group, and the experimental group. At the beginning of the study was applied a pre-test for the two groups then, the treatment of flipped classroom and traditional method were applied for the different groups. Finally, a post-test was taken for the two groups. The participants for this study were 220 first year undergraduate English major students at Nakhon Ratchasima Rajabhat University in the second semester of the academic year 2017. The results of this study showed that students of the experimental group improved their reading compression thanks to the applied method.

Abbasian and Azeez (2021) led a study which investigated the effect of using the flipped classroom to improve reading comprehension. This investigation was quasi-experimental, a pre-test and a post-test were applied in a control group and experimental group. This study was applied in the English language department of Cihan University, Erbil. The participants in this study were 40 students of elementary and intermediate levels. For this study, six sessions were applied divided into three sessions using flipped classroom with the experimental group and three sessions using the conventional method with the control group. The results of this study showed that flipped classes help to improve reading comprehension in the experimental group. In the pre-test, the participants had 43% of the correct answers and in the post-test, they had 54% of the correct answers. On the other hand, in the pre-test of the control group the participants had 42% of the correct answers and in the post-test, they had 49% of the correct answers. Finally, the flipped class help to improve reading comprehension because with this approach students get their knowledge by investigating.

Song (2021) conducted an investigation that aimed at exploring the computer application through flipped classroom approach in reading critical thinking. The methodology was quasi-experimental, there were an experimental group and a control group. A pre-test and a post-test were taken, the participants were a complete class of the third year of college. After the treatment was applied a critical reading test was for the two groups, and the results showed an improvement in the experimental group because before the treatment the score of the class was 45,6% and after the treatment, the final score was 74,5%. Finally, it means that the experiment had an effective result.

Fulgueras and Bautista (2020) carried out an investigation whose main aim was to investigate the effects of the flipped classroom in enhancing critical thinking and reading comprehension. This study was an experimental investigation that was divided into the control and the experimental group. The participants were 212 students at high school ESL from the Philippines; both groups received 15 sessions. The experimental group received the flipped classroom classes, and the control group received the

conventional classes. A pre-test was applied before the treatment and a post-test was applied after the treatment and both results were compared, these results showed that the experimental group significantly improved the reading comprehension while the control group almost had the same results in the pre-test and post-test.

Hashemifardnia, Namaziandost, and Shafiee (2018) conducted a study that had the objective to study the effect of implementing flipped classroom on Irian junior high school students' reading comprehension. This study was experimental because a pre-test was applied before the treatment and after the treatment was applied a post-test. The participants were 50 Irian pre-intermediate students. This study had one group divided into two groups, the experimental and the control group. The treatment of this experiment was in 8 sessions of 50 minutes and in the last session the post-test was applied, and the results showed that students of the experimental group improved their reading comprehension in a significant way in comparison to the control group.

Abaeian and Samadi (2016) led an investigation that aimed to study the effect of the flipped classroom on reading comprehension of Irian ESL at different levels. Checking the methodology this study was experimental because it had one group divided into two groups, the experimental and the control group. The participants were 120 students of two different institutes of English on Irian. the treatment during 18 sessions the control group received traditional classes while the experimental group received flipped classes. A pre-test was applied for the two groups before the treatment and a post-test was applied for the same two groups after the treatment. The results of this experiment showed that students of the experimental group improve their reading comprehension while the control group kept their reading level.

The flipped classroom is an important approach to develop and improve reading comprehension, in previous investigations showed that the flipped classroom always had good results in the students who used it to develop their reading skill. Furthermore, the previous investigations used a pre-test and a post-test to know the level of the student's reading as in this investigation.

1.2 Technical – scientific foundation

Innovative education

According to Liu., He, Guo, Zhou, and Yu (2021) innovative education is always improving according to education needs and technology advances. In addition, students' learning depends by themselves because to get new knowledge the most important things are the students' abilities and capabilities. It means that to have good results in education students must demonstrate their motivation, hard work, enthusiasm, and dedication for something. Therefore, technological approach and innovative pedagogical technologies are characterized by wide application and guaranteed results (Pharmonov, 2018). Innovation in education means doing what's best for all students. Teachers, lessons, and curriculum must be flexible. We have to get our students to think and ask questions (Ascione, Di Palma, and Rose, 2019)

Blended learning

Hrastinski (2019) argue that blended learning has some meanings, one of the most important is that blended learning is a combining mode of technology, pedagogical approaches, instructional technologies, and actual jobs. Furthermore, blended learning is a process that requires two or more different kinds, and these have to be mixed. Finally, one of the most important models in blended learning is the community of inquiring framework, and it works in both modalities of learning, face-to-face, and online learning (Boelens, De Wever, and Voet, 2017)

Dziuban, Graham, Moskal, Norberg, and Sicilia (2018) state that blended learning is focused on the characteristics of technology and the pedagogical methods, also blended learning is a process of communication created by humans but without the intervention of a person, and this process is developed and adapted according to the humans' needs.

Flipped classroom

Bergmann and Sams (2019) two chemistry teachers at Woodland Park High School in Woodland Park Colorado, coined the term "Flipped Classroom." Bergmann and Sams found that students frequently missed some classes for certain reasons (illness, for example). To help these students, they promoted the recording and distribution of video but also realized that this same model allows the teacher to focus more attention on the individual learning needs of each student.

According to Yousufi (2020) flipped classroom is connecting with the learning inside and outside classroom learning modes. For this reason, it is important to know that flipped classroom is an approach that relates to technology because learners are free to enter information about any topic without limits. Furthermore, this approach is very different from the traditional method because, in traditional methods, a teacher with students make the class and students have to do homework outside the classroom, but in a flipped classroom, students have to check the reading book, the activities to be familiarized with the topic they will be about.

According to Namaziandost et al. (2019) the flipped classroom model seems to rest on a series of theoretical foundations. The first of the fundamentals is the blended learning approach, as the conference moves away from class to online delivery and uses face-to-face class time for the actual application.

Aguilera et al. (2017) state that using the term Flipped Classroom we must bear in mind that many similar models of instruction have been developed under other names. Peer Instruction (PI) was developed by Harvard professor Eric Mazur and incorporates a technique called "just-in-time teaching as a complementary element to the FC model. Just-in-time teaching allows the teacher to receive feedback from students the day before class so that he can prepare strategies and activities to focus on the deficiencies

that may exist in students' understanding of the content. Mazur's model focuses largely on conceptual understanding, and although this element is not a necessary component of FC, it has clear and close connotations.

Namaziandost et al. (2019) ask: Is it possible to present content complex other than in person? This question is the ones that teachers have been asking in recent years around the world and there has been an explosion on the subject of methodology with a wide variety of proposals on active learning methodologies, whose use it goes from early childhood education to the University stage. With flipped learning exactly this has happened, possibly entering with greater ease in higher education allowing faculty to prepare their classes otherwise, and above all, for students to access important content to their learning in a more individualized way and at their own pace.

In this section, we will analyze three important and necessary questions as elements to apply flipped learning such as Needs of the learning model. Key elements to analyze flipped learning. Execution phases to implement the methodological model in the classroom.

Aguilera et al. (2017) state that the flipped learning model or the construction of flipped classroom are based on largely the technological possibilities, not so much on the teacher who may well resort to academic content, explained, and displayed on the network and that can facilitate learners in many ways, but learners can have technological possibilities that allow you to approach such content.

Receptive skills

According to Harmer (1987) language contains receptive and productive skills, receptive skills are listening and reading. Reading is a kind of communication

because, through letters, papers, writings, etc. writers can express their feelings and everything that they want to communicate. On the other hand, in the English language, the receptive skill is too important because when people understand the receptive skills, they can practice the productive skills.

Language is the expression of human personality in words whether in speech or letter. It serves as the universal medium for conveying the common facts and feelings of everyday life. Students communicate with one another and with the teacher (Sreena and Ilankumaran, 2018). Through the basic of the language skills, the learner can improve knowledge in the second language (Vos and Fouché, 2021).

Reading comprehension

Shastri (2009) affirms that reading skill is one of the most important skills for English learners because, first, learners must know reading in their language. Reading is a receptive skill, but it needs active participation from learners. Furthermore, reading has as aim those readers can get clear information of the written papers. Reading is a process in which the brain, eyes, and mouth should be connected to get a good result of the reading. Reading is divided into some strategies to develop this skill:

1. Skimming

It is a pre-reading to analyze if the reading is about our interests or not. This strategy is used at the first or the last minute to read because with this strategy readers can be sure about the title or the main idea of the reading.

2. Scanning

It is a quick reading to get specific details like phone numbers, difficult words to find the meaning in a dictionary, also this strategy is to find yes or no answers and true or false questions

3. Intensive reading

Is it based on accuracy and this is a higher level because this strategy is

used for making notes for examination, official documents and medical papers, etc. this strategy has exercises to answer with critical think and inferential answers.

4. Extensive reading

It is a global activity, this strategy is used to read for pleasure like novels, jocks, stories, etc. When people read for pleasure, they don't worry about the meaning of words.

According to Shastri (2009) reading is the process to receive and interpret information from encoded language. This skill could be developed for learners in their situations because they are free to practice this skill. Also, reading starts from a word as the small unit of meaning until the largest one.

Fahmi et al. (2020) state that reading comprehension is the ability to communicate a text, this an integrated process to understand the reading and the prior knowledge about the topic so, reading is not only understanding the reading, but also more than read because it is the construction of a concept with the information of a text and the previous knowledge about the topic. In addition, the previous knowledge of the reading is too important because when readers do not know the meaning of a word they can interoperate with the context or their knowledge so, if readers find words which they do not the meaning they can follow the reading and understand it

According to Shastri (2009) comprehension needs linguistic and extra linguistic knowledge. Comprehension is divided into these skills:

1. Global

It helps to understand overall the topic, the main theme, and the sub themes.

2. Local

It helps to understand the specific points of the explicit information.

3. Referential

It helps to get the information referring to the different parts of the text.

4. Inferential

It helps to infer from the facts which are not explicitly in the text.

1.3 Objectives

1.4.1 General Objective

- To determine the benefits of using flipped classroom approach to improve the reading comprehension in students at “Nueva Era” high school.

1.4.2 Specific Objectives

- To identify the reading comprehension level in students at “Nueva Era” high school.
- To establish the strategies to apply flipped classroom to develop reading comprehension.
- To analyze the results of the pre-test and post-test based on the application of flipped classroom.

1.5 Description of the fulfillment objectives

The current research is aimed to determine the benefits of using the flipped classroom approach to improve the reading comprehension. For this reason, some activities were organized by Google Classroom, because the most important fact about this approach is that students can be free at the moment to learn about a topic so, the Google Classroom is free, and students can learn without limits. Also, with the student’s contribution to get the result was used a pre-test and a post-test.

CHAPTER II

METHODOLOGY

This chapter contains information about the sample selected for the investigation, the technique and instrument used, the resources, the basic method, the design, the field research, and finally the procedure which describes the steps that researcher follow in order to use the flipped classroom approach.

2.1 Resources

2.1.1 Population

To develop this research the participants, involve were 8 students in total, 3 women and 5 men. They were in the second baccalaureate at “Nueva Era” high school located in Ambato. They were teenagers from 16 to 18 years old. This investigation lasted 4 weeks in which all the participants received fivesessions in total at the face-to-face modality.

Description	Number	Percentage
Women	3	62.5%
Men	5	37.5%

Source: Field research

Author: Castro, S. (2022)

2.1.2 Instruments

A pre-test and post-test to recognize students’ level of reading skills. This instrument was taken from the standardized KET designed by Cambridge Assessment English (see annex 2). The students took these tests in print papers at their highschool. The pre-test was taken at the beginning of the experiment to recognize their knowledge of the reading section. The post-test was taken after the treatment with the flipped classroom, to analyzed if students improved their reading skill level.

The KEY test contains five parts and thirty questions in total. The questions are multiple choice about the different readings, each question marks one point.

2.1.3 Materials

- Selected videos were taken from YouTube (3 videos), with the aim that students can watch and analyze the information from the videos at home before attending the class. These videos were carefully chosen according to students' needs and reading strategies to improve this skill. Also, these videos contained the explanation about the reading strategies.
- Extra activities to practice after watching and analyzing the information from the videos that were uploaded to the Google Classroom. These extra activities were taken from reading test preparation from Cambridge. These activities contained a reading passage and questions to answer for practicing. Furthermore, these tasks were recollecting by the teacher at classes.
- Google Classroom to upload and organize all the information provided by the teacher. The information was divided into videos and extra activities.

2.1.4 Procedure

In the first session face-to-face modality, the researcher introduced herself to the class and showed students how to register in the Google Classroom platform. Students had to register in Google Classroom for the next class. After that, the researcher asked students about the flipped classroom, if they ever tried in their classes with a teacher. The same day the pre-test was taken to students in 30 minutes.

In the second intervention, the teacher asked if students had any problem at the moment registering in Google Classroom. Then, the homework was explained, and they had to complete it for the next class, they had to watch a video about skimming strategy and complete the same activity.

In the third intervention, the teacher asked students what they think about the

skimming strategy? what is skimming? How to use this strategy? Then, the teacher and students checked the answers to the homework that they had to complete for the class and the teacher collected the homework. Finally, the next class homework was explained, they had to watch and analyze the video of scanning strategy and complete an extra activity using this strategy.

In the fourth intervention, the teacher asked some questions about what is scanning strategy? How is it works? And explained how the scanning strategy works. After that, the teacher and students checked the answers to the homework that they had to complete for the class and the teacher collected the homework. Finally, the next class homework was explained, they had to watch the videos about extensive and intensive reading and analyze it.

Finally, in the last session, the teacher and students had a short discussion to analyze all the information learned from the videos. The last activity was the teacher gave the post-test to students to complete in 30 minutes.

2.2 Methods

Research approach

This project used a quantitative method as a way to collect numerical data, analyze, and interpret them for explaining the fact Creswell (2014). The researcher quantified and analyzed numerically the data obtained from the test reading comprehension is promoted and practiced in the classroom, as well as code data from the pre-test and posttest for comparing and analyzing the differences in terms of scores found after and before the flipped classroom.

Basic method of investigation

This project was applied in the following types of research and investigation.

Research design

According to Hernandez et al. (2013) is pre-experimental design due to only one group being implied in the independent variable of the problem. This group is the only one that has experimented and received the interventions. Students received the treatment in 5 sessions of 20 minutes inside the classroom and 40 minutes outside the classroom. Furthermore, it is pre-experimental because it worked with a group of 8 students from 16 to 18 years old at “Nueva Era” high school. The independent variable was possible to measure before and after the application of the flipped classroom by using the standardized pre-test, and post-test provided by Cambridge.

Biographic or documentary research

According to Mas-Tur, Kraus, Brandtner, Ewert, and Kürsten (2020) bibliographic research is defined as the previous documents as, books, papers, newspapers, journals, websites, or reports. This investigation was bibliographic because it allowed to analyze the information of different published materials as, book, papers, newspaper, websites or reports to develop the investigation of the two variables the flipped classroom and the reading comprehension.

Field research

This study allows students to improve students’ reading skills from the “Unidad Educativa Nueva Era” this study was in a presential modality with 8 students of the second baccalaureate.

CHAPTER III

RESULTS AND DISCUSSION

3.1 Analysis and discussion of the method

The present chapter shows the results and the analysis gathered for 5 weeks: before, during, and after the treatment. To present the results understandable and clear, everything is represented in tables, graphics and everything has a clear written explanation about the results.

This experiment was applied with 8 students from the 2nd baccalaureate that were taking the English subject at “Nueva Era” high school, they were in face-to-face modality.

The results of students’ grades on the pre-test and the post-test KEY reading paper created by Cambridge English, were analyzed by T- test using the SPSS Software program.

To assess the pieces of reading paper answered by the students, there is a paper with the answers key. It is important to mention that the reading paper is divided into 5 different parts. The first part is to choose the correct answers according to the short texts. The second and the third parts are to read and analyze the passages and choose the correct answers according to the reading texts. The fourth part is to choose the correct answer to complete the text in the right way. Finally, the fifth part is to write the correct word to complete the text. This paper has 30 marks in total. To make the more understandable the results was important to make a three ruler get grades over 10.

The scores over 10 and on a scale over 30 are presented in the following tables. Both tables are created to show a clear idea about the results of the tests. Table 1 is with the

pre-test grades it means that these grades are before the treatment. Table 2 is with the post-test grades it means that these grades are after the treatment using the flipped classroom to improve the reading skill.

Table 1: Pre-test results

Researched group	Score over 10	Cambridge score over 30
Student 1	5.6	17
Student 2	7.0	21
Student 3	3.3	10
Student 4	2.3	7
Student 5	2.6	8
Student 6	7.3	22
Student 7	5.6	17
Student 8	3.3	10
Average	4.6	14

Source: Field research

Author: Castro, S. (2022)

Table 2: Post-test

Researched group	Score over 10	Cambridge score over 30
Student 1	8.0	24
Student 2	9.0	27
Student 3	7.0	21
Student 4	7.0	21
Student 5	8.3	25
Student 6	9.0	27
Student 7	8.0	24
Student 8	7.0	21
Average	7.9	23.7

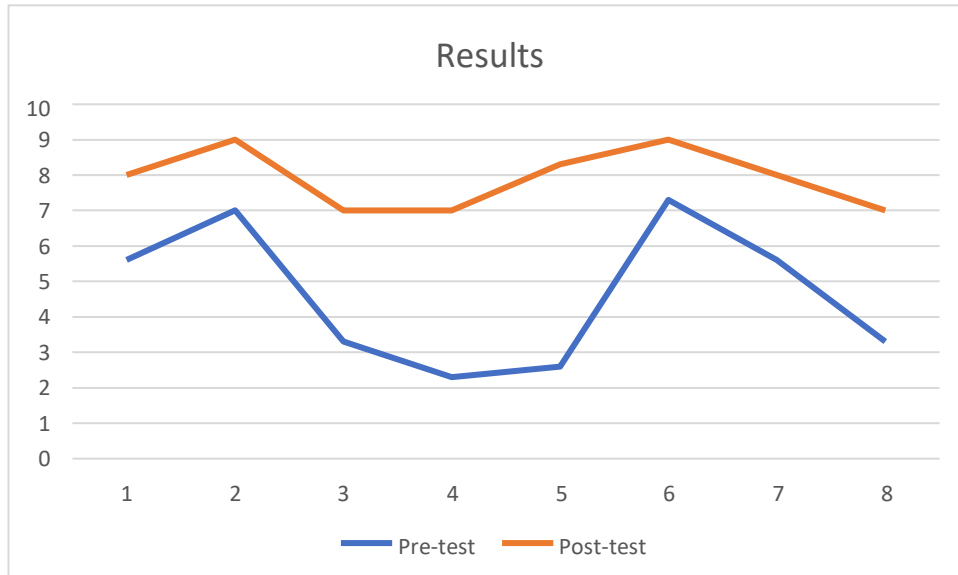
Source: Field research

Author: Castro, S. (2022)

3.2 Data interpretation

Pre-test and post-test individual grades

Figure 1: results pre-test and post-test over 10



Source: Field research

Author: Castro, S. (2022)

Analysis and interpretation

Figure 1 shows that 8 students took the pre-test and post-test. Making a comparison between both results of the tests is shown, these tests were graded by using a scale over 30 points created by Cambridge, and then the grades had to be transformed into grades over 10. In the pre-test, the lower grade was 7 over 30 and the highest was 22 over 30. On the other hand, the grades of the post-test improved in a significant way because the lower grade was 21 over 30 and the highest was 27 over 30.

The results show that most of the students in the pre-test had a low grade because they do not have a clear idea of how to read the passages in the determinate time that was 30 minutes. On the other hand, after the treatment using the flipped classroom approach most students had a high grade. After all, they could improve their reading skills because they use different strategies to develop the reading in the determinate time.

Pre-test and post-test average

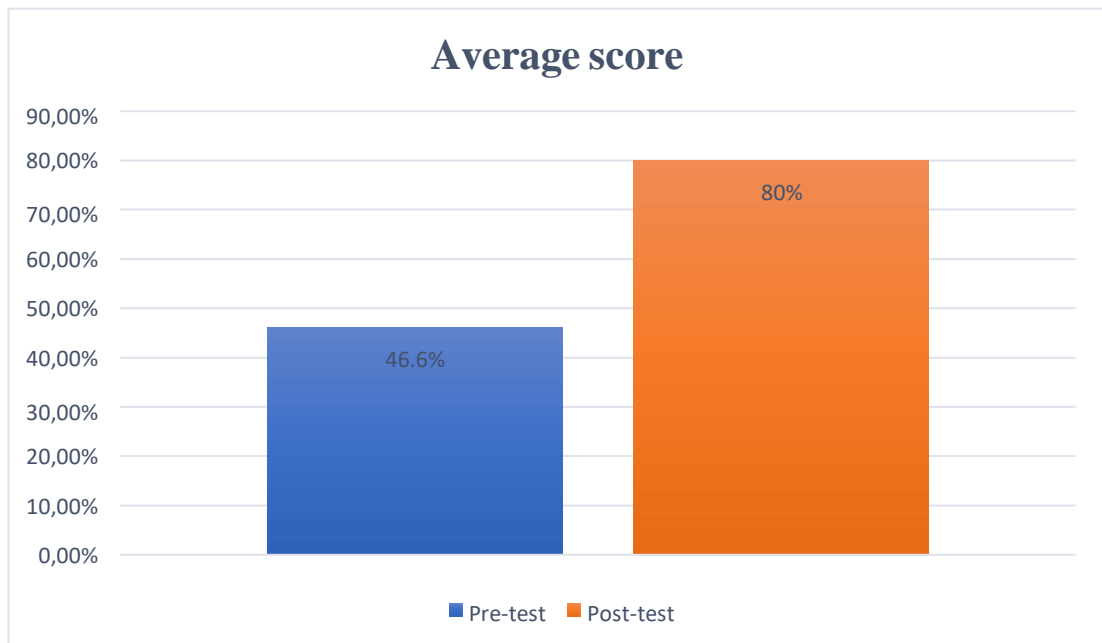
Table 3: Pre-test and post-test average and difference

Results	Pre-test	Post-test	Difference
Average	14	23.7	9.7

Source: Field research

Author: Castro, S. (2022)

Figure 2: Average scores pre-test and post-test



Source: Field research

Author: Castro, S. (2022)

Analysis and interpretation

Table 3 and figure 2 show the average score of the results obtained in the pre-test and the post-test, also show the difference of both results. In the pre-test, the average obtained from the 8 students at Nueva Era high school was 14 over 30 which represents 46.6%. On the other hand, in the post-test students obtained 23.7 over 30 which

represents 80%. Additionally, students improve 9.7 points more like a class and it represents 33.4% of students' improvement in their reading comprehension.

Finally, the results show that the use of the flipped classroom to improve students' reading comprehension is effective.

3.3 Hypothesis verification

This research obtained the results and gathered from 8 students. The results were analyzed by at-student statistical test in the SPSS program.

Hypothesis statement

Null Hypothesis

The flipped classroom approach doesn't help to improve the reading comprehension of the students.

Alternative Hypothesis

The flipped classroom approach helps to improve the reading comprehension

T-student test – Paired Samples Statistics

Table 4: T-student-Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre. test	4,6250	8	1,98980	,70350
	Post-test	7,9125	8	,84758	,29966

Source: Field research

Author: Castro, S. (2022)

Analysis and interpretation

In table 4 is possible to analyze the results obtained in the test, the mean score of the pre-test is 4,6250 and the mean score of the post-test is 7,9125. In this case, the result of the post-test is better than the pre-test so, the difference was signified.

Paired Samples Test

Table 5: Paired Sample Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pre-test/ Post-test	-3,28750	1,40960	,49837	-4,46595	-2,10905	-6,597	7	,000

Source: Field research

Author: Castro, S. (2022)

Analysis and interpretation

Table 5 is shown that P-value is 0,00 which is lower than 0.05. So, there is evidence to refute the null hypothesis “The flipped classroom approach doesn’t help to improve the reading comprehension of the students” and approve the alternative hypothesis “The flipped classroom approach helps to improve the reading comprehension”.

3.4 Discussion

In this research it was possible to determine whether or not the use of the flipped classroom to improve the reading comprehension, and the way it affected on their academic progress by analyzing data obtained from the results through SPSS software in which the alternative hypothesis was accepted.

The application of the flipped classroom to improve the reading comprehension obtained good result because students can learn and develop the different strategies of reading such as: skimming, scanning, intensive and extensive reading. Furthermore, reading is a free receptive skill in which students can be concentrated to get information to analyze it to have a good understanding of the reading Shastri (2009).

On the other hand, the results showed were good as in the previous investigations about the use of the flipped classroom, it had benefits because students could work inside and outside the classroom without limits Yousufi (2020).

The flipped classroom helped students to improve their reading comprehension because they could analyze and used the different strategies of reading by watching the videos uploaded in the Google classroom. Before the treatment, most of the students got lower than 5 points over 10 in the pre-test because they got difficulty concentrating on the reading passages. Finally, after the treatment students improved their reading comprehension because they already know the strategies to read and answer the questions, so in the post-test students got more than 7 points over 10.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

The following conclusions have been got after finishing this research.

The use of flipped classroom showed good benefits in the reading comprehension students' development. Reading skill was difficult for the students at "Nueva Era" high school because they did not know how to distribute the time or what strategies they could use now that they were reading. When using flipped classroom to teach a reading skill they watched videos and did activities about reading strategies like skimming and scanning so, they got good benefits in their reading comprehension.

The level of reading comprehension in students from the second baccalaureate was identified through the pre-test in which the results showed that students' average score was 4.6 over 10 and it means that students had problems with the reading comprehension principally because they did not know strategies to apply at the moment they were reading.

The positive facts were that students understood the strategies to read and analyze the reading to answer the questions correctly. Also, students were free to watch the videos about the explanations. On the other hand, one of the negative fact was that students could be distracted easily because they were using the technology to learn.

The results obtained showed that students had a low level in reading comprehension so, the scoring average was 4.6 in the pre-test which was taken by students before the treatment of flipped classroom. On the other hand, students could improve their reading comprehension because after the treatment they took the post-test, and the scoring average was 7.9.

4.2 Recommendations

To finish the study about flipped classroom and the reading comprehension is good to recommend some important aspects to have good benefits in students.

For having positive benefits in reading comprehension using the flipped classroom, it is recommended to use technology with the aim that the information posted in the platform, or the classroom can be free and without time limit.

For having good results using the flipped classroom to teach reading it is recommended to choose the appropriate material for example: the videos should not be more than 10 minutes that students are engaged on it, also the practice activities

For determining the benefits of the use the flipped classroom it is recommended to give feedback about the videos that students had to watch and checked the practice activities because it is important to remind that students' role is too important. After all, they were learned at home, and they need a checking about their learning.

For having good results with the use of flipped classroom the teacher should be sure that students must receive all the information about the topics, aims, and materials that they are going to use because they must be attentive to the platform that they are going to use.

Reference list

- Abaeian, H., & Samadi, L. (2016). The Effect of Flipped Classroom on Iranian EFL Learners' L2 Reading Comprehension: Focusing on Different Proficiency Levels. *Journal of Applied Linguistics and Language Research*, 3(6), 295–304. www.jallr.com
- Abbasian, M. R., & Azeez, I. B. (2021). The Effect of Using Flipped Class on Teaching Reading Comprehension at Cihan University. *Cihan University-Erbil Journal of Humanities and Social Sciences*, 5(1), 101–105. <https://doi.org/10.24086/cuejhss.v5n1y2021.pp101-105>
- Aguilera-Ruiz, C., Manzano-León, A., Martínez-Moreno, I., Lozano-Segura, M. C., & Casiano Yanicelli, C. (2017). El modelo Flipped Classroom. *International Journal of Developmental and Educational Psychology. Revista INFAD de Psicología.*, 4(1), 261. <https://doi.org/10.17060/ijodaep.2017.n1.v4.1055>
- Chavangklang, T., & Suppasetsee, S. (2020). Enhancing Thai Efl University Students' Reading Comprehension Through a Flipped Cooperative Classroom. *PEOPLE: International Journal of Social Sciences*, 4(3), 238–261. <https://doi.org/10.20319/pijss.2018.43.238261>
- Dziuban, C., Graham, C. R., Moskal, P. D., Norberg, A., & Sicilia, N. (2018). Blended learning: the new normal and emerging technologies. *International Journal of Educational Technology in Higher Education*, 15(1), 1–16. <https://doi.org/10.1186/s41239-017-0087-5>
- Fahmi, R., Friatin, L. Y., & Irianti, L. (2020). The Use of Flipped Classroom Model in Reading Comprehension. *Journal of Applied Linguistics and Literacy*, 4(1), 18. <https://jurnal.unigal.ac.id/index.php/jall/index>
- Fong, C. M., & Hoon, N. M. (2020). A Conceptual Framework: The Integration of SQ3R in Flipped Classroom Model for Chinese Reading Comprehension. *International Journal of Academic Research in Progressive Education and Development*, 9(2). <https://doi.org/10.6007/ijarped/v9-i2/7484>
- FULGUERAS, M. J., & BAUTISTA, J. (2020). Flipped Classroom: Its Effects on ESL Learners' Critical Thinking and Reading Comprehension Levels.

- International Journal of Language and Literary Studies*, 2(3), 257–270.
<https://doi.org/10.36892/ijlls.v2i3.228>
- Harmer, J. (1987). Learning the Language of Practice. *Curriculum Inquiry*, 17(3), 293–318. <https://doi.org/10.1080/03626784.1987.11075294>
- Hasanah, I., & Arifani, Y. (2020). *The Effect of Flipped Classroom toward ESP Students Reading Comprehension. Bices 2018*, 226–236.
<https://doi.org/10.5220/0009019102260236>
- Hashemifardnia, A., Namaziandost, E., & Shafiee, S. (2018). The Effect of Implementing Flipped Classrooms on Iranian Junior High School Students' Reading Comprehension. *Theory and Practice in Language Studies*, 8(6), 665.
<https://doi.org/10.17507/tpls.0806.17>
- Hrastinski, S. (2019). What Do We Mean by Blended Learning? *TechTrends*, 63(5), 564–569. <https://doi.org/10.1007/s11528-019-00375-5>
- Karimi, M., & Hamzavi, R. (2017). The Effect of Flipped Model of Instruction on EFL Learners' Reading Comprehension: Learners' Attitudes in Focus. *Advances in Language and Literary Studies*, 8(1), 95.
<https://doi.org/10.7575/aiac.all.v.8n.1p.95>
- Liu, Y., He, W., Guo, S., Zhou, W., & Yu, D. (2021). *A Whole-Process Innovative Education on Undergraduate Students Based on Scientific Investigations. 517(Sschr 2020)*, 271–275. <https://doi.org/10.2991/assehr.k.210121.057>
- Mas-Tur, A., Kraus, S., Brandtner, M., Ewert, R., & Kürsten, W. (2020). Advances in management research: a bibliometric overview of the Review of Managerial Science. *Review of Managerial Science*, 14(5), 933–958.
<https://doi.org/10.1007/s11846-020-00406-z>
- Namaziandost, E., Neisi, L., & Momtaz, S. (2019). The Effectiveness of Flipped Classroom Model on Listening Comprehension Among Iranian Upper-intermediate EFL Learners. *Journal of Applied ...*, 6(4), 129–139.
https://www.researchgate.net/profile/Ehsan_Namaziandost/publication/336362143_The_Effectiveness_of_Flipped_Classroom_Model_on_Listening_Comprehension_Among_Iranian_Upper-

intermediate_EFL_Learners/links/5d9d4eea92851c2f70f72779/The-
Effectiveness-of-Flipped

Shastri, P. (2009). Teaching Reading Skills. *Improving Literacy in the Primary School, 2009*, 138–163. <https://doi.org/10.4324/9780203978290-13>

Song, P. (2021). Computer Flipped Classroom in Critical Reading of College English. *Journal of Physics: Conference Series, 1992*(4).
<https://doi.org/10.1088/1742-6596/1992/4/042008>

Sreena, S., & Ilankumaran, M. (2018). Developing Productive Skills Through Receptive Skills – A Cognitive Approach. *International Journal of Engineering & Technology, 7*(4.36), 669. <https://doi.org/10.14419/ijet.v7i4.36.24220>

Yousufi, U. (2020). An Integrative Review of Flipped Classroom Model. *American Journal of Educational Research, 8*(2), 90–97.
<https://doi.org/10.12691/education-8-2-4>

ANNEXES

Annex 1: Lesson plans

INFORMATIVE DATA:

TEACHER: Sofia Castro

AREA: ENGLISH

SCHOOL YEAR: September 2021-June 2022

SUBJECT: English

COURSE: 2 BACH

PARALLEL: A

GROUP: There are 8 students in this group, 5 men and 3 women.	DATE: December 07 th , 2021	TIME: 40 minutes	N° OF STUDENTS: 8
<p>Objective: Students will be able to get familiarized with the flipped classroom approach. Ss will get enroll in the Google classroom and use it to develop the reading skills during the time of the experiment.</p>			
<p>Assessment: Ss. have to register into the Google classroom</p>			
<p>Materials: Laptop, Tv, internet, power point presentation</p>			
TIMING	TEACHER ACTIVITY		
40 minutes	<ul style="list-style-type: none"> • T. will greet • T. will ask some questions about flipped classroom. • T. will show the Power Point presentation • T. will explain what the project is about • T. will explain the main objective and the methodology. • T. will show the Google classroom and how to register into the class with the code. (bs3fs3r) https://classroom.google.com/c/NDMyOTA4NzQ2Njk1?hl=es&cjc=bs3fs3r • Ss. will take notes to register into the Google platform • T. will give the pretest. • Ss. will complete the reading test. 		
<p>Homework/Further work: Ss. have to register into the Google classroom.</p>			

INFORMATIVE DATA:**TEACHER:** Sofía Castro**AREA:** ENGLISH**SCHOOL YEAR:** September 2021-June 2022**SUBJECT:** English**COURSE:** 2 BACH**PARALLEL:** A

GROUP: There are 8 students in this group, 5 men and 3 women.	DATE: December 08 th , 2021	TIME: 20 minutes	N° OF STUDENTS: 8
Objective: Students will be able to use skimming strategy to improve their reading comprehension			
Assessment: Check the google platform and complete the first activity			
Materials: Laptop, Tv, internet, power point presentation			
TIMING	TEACHER ACTIVITY		
20 minutes	<ul style="list-style-type: none"> • T. greets students and presents the objectives and the topic of the lesson. • T. asks some questions about problems to register into the Google classroom. • Ss. ask about the registration • T. answers the questions • T. shows the google classroom and asks Ss to watch the video and complete the skimming activity at home • Ss. take notes about the homework 		
Homework/Further work: Ss. have to watch the video and complete the skimming practice			

INFORMATIVE DATA:**TEACHER:** Sofía Castro**AREA:** ENGLISH**SCHOOL YEAR:** September 2021-June 2022**SUBJECT:** English**COURSE:** 2 BACH**PARALLEL:** A

GROUP: There are 8 students in this group, 5 men and 3 women.	DATE: December 15 th , 2021	TIME: 20 minutes	N° OF STUDENTS: 8
Objective: Students will be able to use scanning strategy to improve the reading comprehension			
Assessment: Check the google platform and complete the second activity			
Materials: Laptop, Tv, internet, power point presentation			
TIMING	TEACHER ACTIVITY		
20 minutes	<ul style="list-style-type: none"> • T. will greet • T. will ask some questions about problems in the platform • T. will ask some questions: what is skimming strategy? How is it works? • Ss. will answer the questions • T. will explain how skimming strategy works • Ss. Will ask some questions about the assessment • T and Ss. Will check the answers of the assessment. 		
Homework/Further work: Ss. have to watch the video and complete the scanning practice			

INFORMATIVE DATA:**TEACHER:** Sofía Castro**AREA:** ENGLISH**SCHOOL YEAR:** September 2021-June 2022**SUBJECT:** English**COURSE:** 2 BACH**PARALLEL:** A

GROUP: There are 8 students in this group, 5 men and 3 women.	DATE: December 20 th , 2021	TIME: 20 minutes	N° OF STUDENTS: 8
Objective: Students will be able to use extensive strategy to improve the reading comprehension			
Assessment: Check the google platform and complete the first activity			
Materials: Laptop, Tv, internet, power point presentation			
TIMING	TEACHER ACTIVITY		
20 minutes	<ul style="list-style-type: none"> • T. will greet • T. will ask some questions about problems in the platform • T. will ask some questions: what is scanning strategy? How is it works? • Ss. will answer the questions • T. will explain how scanning strategy works • Ss. Will ask some questions about the assessment • T and Ss. Will check the answers of the assessment. 		
Homework/Further work: Ss. have to watch the videos about extensive and intensive reading			

INFORMATIVE DATA:**TEACHER:** Sofía Castro**AREA:** ENGLISH**SCHOOL YEAR:** September 2021-June 2022**SUBJECT:** English**COURSE:** 2 BACH**PARALLEL:** A

GROUP: There are 8 students in this group, 5 men and 3 women.	DATE: January 03 rd , 2022	TIME: 40 minutes	N° OF STUDENTS: 8
Objective: Students will be able to know what the project's topic is about			
Assessment:			
Materials: Laptop, Tv, internet, power point presentation			
TIMING	TEACHER ACTIVITY		
40 minutes	<ul style="list-style-type: none"> • T. will greet • T. will ask some questions about problems in the platform • T. will ask some questions: what is extensive strategy? How is it works? • T. will ask some questions: what is intensive strategy? How is it works? • Ss. will answer the questions • T. will explain how these strategies works • T. will give the post test 		
Homework/Further work:			

Annexes 2: Test



**Cambridge Assessment
English**

KEY ENGLISH TEST

Reading

Sample Test

Time 30 minutes

INSTRUCTIONS TO CANDIDATES

Do not open this question paper until you are told to do so.

Read the instructions for each part of the paper carefully. Answer all the questions.

Read the instructions on the answer sheet.

Write your answers on the answer sheet. Use a pencil. You **must** complete the answer sheet within the time limit.

At the end of the test, hand in both this question paper and your answer sheet.

PV1

500/2416/4

Copyright © UCLES 2018
(Entry 2)

Cambridge English Entry Level Certificate in ESOL International

Part 1

Questions 1 – 6

For each question, choose the correct answer.

1

For Sale
Women's bicycle (small)
11 years old - needs new tyres
Phone Debbie
- 0794587454



- A The bicycle that's for sale was built for a child.
- B Some parts of the bicycle must be changed.
- C Debbie is selling the bike because she's too big for it now.

2



Hi Ben
I've booked concert tickets for both of us online. Can you give me the money this afternoon when I see you?
Tim

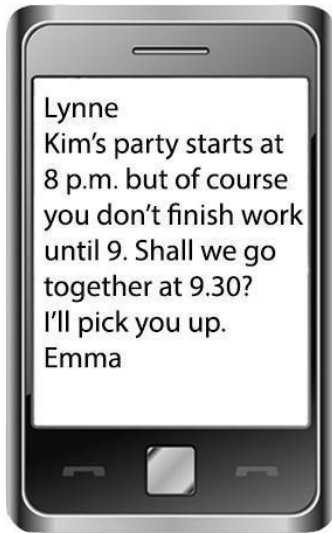
- A Tim thinks Ben should look on the concert website.
- B Tim hopes that Ben will be able to come with him.
- C Tim wants to know if Ben can pay him back today.

3



ADVENTURE PARK
Half-price tickets for groups of 12 or more
Ask at entrance

- A You get into the park by going this way.
- B It is more expensive to go here alone.
- C You will have fun if you come with friends.



- A** Emma knows that Lynne can't be at the party when it starts.
- B** Emma wants to go to the party a bit later than Lynne.
- C** Emma wants to go out with Lynne but not to the party.



- A** The ice cream shop is open for only 2 hours.
- B** Two ice creams will cost the same as one.
- C** You can get free ice creams all afternoon.



- A** to check if Anna has completed her homework
- B** to let Anna know what they did in class today
- C** to ask Anna to contact her about the homework

Part 2

Questions 7 – 13

For each question, choose the correct answer.

		Tasha	Danni	Chrissie
7	Who writes both a magazine and a blog?	A	B	C
8	Who says that studying and writing a blog at the same time can be hard?	A	B	C
9	Who answers questions from other people who read her blog?	A	B	C
10	Who plans to stop writing her blog soon?	A	B	C
11	Who didn't have many people reading her blog in the beginning?	A	B	C
12	Who asks a member of her family to help her write her blog?	A	B	C
13	Who says writing a blog is easier than some other types of writing?	A	B	C

Young blog writers

Tasha



Last year I wrote for my college magazine, which I found really difficult, but I don't think it's hard to write a good blog. Mine is about things from daily life that make me laugh. My older brother also has a blog, but we're writing about different subjects. We don't discuss what we're planning, but we read each other's blogs sometimes. I like giving advice to people who write in asking for it – it's good to know I've helped.

Danni



I started writing my popular film blog because I love movies. I like it when readers send me articles by email about a film they've seen, and I put these on my blog for everyone to read. I'm still at college, so I'm careful about spending too long on my blog, which is difficult as writing well takes time. I don't think I'll write it for much longer. I'm busy, and it's time to do something new.



I began writing on a school magazine. I stopped after a few years, but I missed it, so I started my own – I'm still writing it now! The blog's new for me, and I write about daily life. I get ideas from friends or my sister when I can't decide what to write about – we always think of something interesting, sad or serious. At first, almost nobody visited my site, but now more do, I've had some lovely comments.

Part 3

Questions 14 – 18

For each question, choose the correct answer.

A family of dancers

The women in the Watson family are all crazy about ballet. These days, Alice Watson gives ballet lessons, but for many years, she was a dancer with the National Ballet Company. Her mother, Hannah, also had a full-time job there, making costumes for the dancers.

Alice's daughter Demi started learning ballet as soon as she could walk. 'I never taught her,' says Alice, 'because she never let me.' Now aged sixteen, Demi is a member of the ballet company where her mother was the star dancer for many years.

Alice's husband, Jack, is an electrician. They met while he was working at a theatre where she was dancing and got married soon after. 'When Demi started dancing, the house was too small for her and Alice to practise in so I made the garage into a dance studio. Now the living room is nice and quiet when I'm watching television!' he says.

Last month, Demi was invited to dance in the ballet *Swan Lake*. Of course, Alice and Hannah were in the audience and even Jack was there, which made it very special for Demi. Jack says, 'I'm not that interested in ballet myself but it's fantastic seeing Demi taking her first steps with Alice's old company!' Demi was wearing a dress that Hannah made for Alice many years before.

'It was very exciting for all of us,' says Hannah. 'Demi's way of dancing is very like Alice's. I know I'm her grandmother, but I think she has a great future!'



- 14 What is Alice Watson's job now?
- A dancer
 - B teacher
 - C dress-maker
- 15 Demi had her first ballet lessons
- A at a very young age.
 - B at the National Ballet Company.
 - C from her mother.
- 16 Jack helped his wife and daughter by
- A moving to a larger house.
 - B letting them use the living room for dancing.
 - C making a place for them to practise in.
- 17 What was the best thing about the *Swan Lake* show for Demi?
- A It was her first show with the company.
 - B All her family were there.
 - C She was wearing a new dress.
- 18 Hannah says that Demi
- A will be a star one day.
 - B is her favourite granddaughter.
 - C dances better than Alice did.

Part 4

Questions 19 – 24

For each question, choose the correct answer.

William Perkin

William Perkin was born in London in 1838. As a child he had many hobbies, including model making and photography. But it was the (19) of chemistry that really interested him. At the age of 15, he went to college to study it.

While he was there, he was (20) to make a medicine from coal. This didn't go well, but when he was working on the problem, he found a cheap (21) to make the colour purple. At that (22).....it was very expensive to make clothes in different colours. William knew he could make a business out of his new colour. Helped by his father and brother, William (23) his own factory to make the colour. It sold well, and soon purple clothes (24) very popular in England and the rest of the world.

- | | | | |
|----|------------|-----------|------------|
| 19 | A class | B subject | C course |
| 20 | A thinking | B trying | C deciding |
| 21 | A way | B path | C plan |
| 22 | A day | B time | C hour |
| 23 | A brought | B turned | C opened |
| 24 | A began | B arrived | C became |

Part 5

Questions 25 – 30

For each question, write the correct answer.
Write **one** word for each gap.

Example:

0	you
---	-----

From:	Maria
To:	John

I hope (0) are well. I'm having a great holiday here in Thailand. Our hotel is very nice and there are a lot of good restaurants near it.

Yesterday morning, we went to (25).....lovely beach. We had to leave before lunch because it was very hot. We went to a party (26)the evening in the centre (27) the town. Everyone had a good time and we got back at midnight. Tomorrow, we want to (28) on a boat trip or (29) tennis.

I'll show you my photos (30).....I get back.

See you soon,

Maria

Annex 3: Tools used for flipped classroom

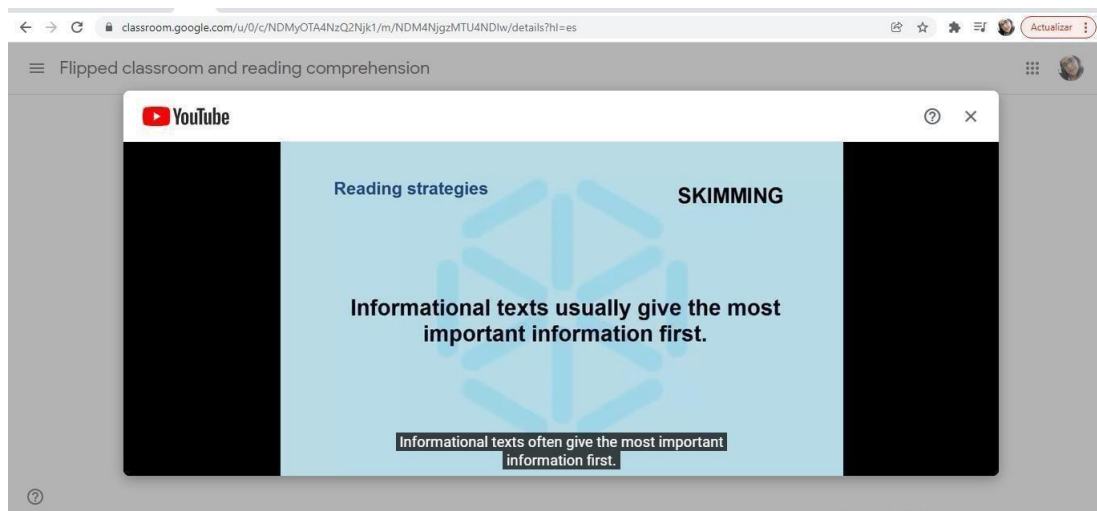
➤ Google Classroom



Source: Castro (2022)

Link: <https://classroom.google.com/c/NDMyOTA4NzQ2Njk1?hl=es&cjc=bs3fs3r>

➤ YouTube videos



Source: Castro (2022)

Annex 4: Extra activities

Skimming practice 1

Get skimming!

Give yourself 60 seconds to skim through the 'Size matters' paragraph below. When you are finished, cover the paragraph up before moving onto the questions.

Size matters

Here's something to think about the next time you go shopping. Have you ever noticed

how many trolleys are available when you go to the supermarket? In my experience, it seems like hundreds! But how about the number of hand baskets? Invariably I struggle to find even one, especially when I only need a few items. Why might this be the case? Well, it seems to be a tactic used to encourage us to buy more. If you are walking around with an empty trolley, you are more tempted to fill it, so if you are planning on only doing a quick shop, always try to find a basket. It will be lighter, easier to use and is sure to save you money!

Questions

Now test your skimming skills and answer the questions below in the space provided. Answers are on the following page.

- 1. What can you find in large numbers at a supermarket?**
- 2. Why can this be a problem?**
- 3. How can you avoid spending more than you planned?**
- 4. Why is it a good idea to use a basket instead of a trolley?**

Annex 5: Pictures







Annex 6: Urkund report



Document Information

Analyzed document	CastroSofía_Dissertation.pdf (D127393738)
Submitted	2022-02-08T18:31:00.0000000
Submitted by	
Submitter email	ccastro4835@uta.edu.ec
Similarity	5%
Analysis address	wilmaesuarzm.uta@analysis.urkund.com

Dra. Mg. Wilma Suárez Mosquera
TUTORA TRABAJO DE TITULACIÓN