

T.C.

**GAZİANTEP UNIVERSITY
GRADUATE SCHOOL OF EDUCATIONAL SCIENCES
DEPARTMENT OF FOREIGN LANGUAGES TEACHING
ENGLISH LANGUAGE TEACHING PROGRAM**

**TRIZ AS AN INNOVATIVE METHOD IN ENGLISH
LANGUAGE TEACHING TO SUPPORT LEARNERS'
READING AND WRITING SKILLS**

MASTER OF ARTS THESIS

BATOUL ALKASEM

**GAZİANTEP
APRIL, 2022**

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Supervisor: Prof. Dr. FATMA FİLİZ TILFARLIOĞLU

GAZIANTEP
APRIL, 2022

APPROVAL OF THE JURY

Student : BATOUL ALKASEM
University : Gaziantep University
Graduate School : Graduate School of Educational Sciences
Department : English Language Teaching
Thesis Title :TRIZ as an Innovative Method in English Language Teaching to Support Learners' Reading and Writing Skills
Thesis Date : 15.04.2022

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Arts.

Prof. Dr. Filiz YALÇIN TILFARLIOĞLU
Head of the Department of Foreign Languages Teaching

This is to certify that I have read this thesis and that in my opinion, it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.

Prof. Dr. Filiz YALÇIN TILFARLIOĞLU
Supervisor

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Arts.

Examining Committee Members	Signature
Prof. Dr. FATMA FİLİZ TILFARLIOĞLU	
Assoc. Prof. Dr. EMRAH CINKARA	
Assist. Prof. Dr. SEDA SIVACI	

It is approved that this thesis has been written in compliance with the formatting rules laid down by the Graduate School of Educational Sciences.

Eğitim Bilimleri Enstitüsü Onayı

Assoc. Dr. Ahmet İhsan KAYA
 Eğitim Bilimleri Enstitüsü Müdürü

ETİK İLKELERE UYGUNLUK BEYANI

Tez yazma sürecinde, bilimsel ve etik ilkelere uyduğumu, yararlandığım tüm kaynakları kaynak gösterme ilkelerine uygun olarak kaynakçada belirttiğimi ve bu bölümler dışındaki tüm ifadelerin şahsıma ait olduğunu kabul ederim. Bu bilgiler doğrultusunda tez çalışmamın herhangi bir intihal içermediğini; aksinin tespit edilmesi halinde doğabilecek her türlü hukuki sorumluluğu onayladığımı beyan ederim.

İmza:

Adı ve Soyadı: BATOUL ALKASEM

Öğrenci Numarası:

Tezin Savunma Tarihi: 15th April 2022

DEDICATION

I dedicate this thesis to both of my parents (Jamal and Aisha), especially my mother, who encouraged me to pursue my dream with her prayers and encouraging words. I wanted my father to be still alive so that he could share this moment with me and be proud of me. Not to mention my sister-in-law, Hala, who always encouraged and supported me, especially while I was working and feeling unconfident.

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ÖZET

İNGİLİZ DİLİ EĞİTİMİNDE ÖĞRENCİLERİN OKUMA VE YAZMA BECERİLERİNİ GELİŞTİRMEK İÇİN YENİLİKÇİ BİR YÖNTEM OLARAK TRIZ

ALKASEM, Batoul

Yüksek Lisans Tezi,

Yabancı Diller Eğitimi Ana Bilim Dalı

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İngilizce öğrenmek, öncelikle, İngilizcenin uluslararası bir dil olması dolayısıyla önemlidir. Ayrıca, İngilizce, eğitim bağlamlarında önemli bir rol oynamakta ve dünyaya açılan bir kapı işlevi görmektedir. Eğitim, öğrencilerin hem bilgi edinmelerini sağlayan hem de yaratıcı düşünme becerilerini geliştiren bir süreçtir. Bu çalışmanın amacı, yabancı dil eğitiminde ve öğretiminde, yenilikçi bir yöntem olarak İngilizce derslerinde yenilikçi bir yöntem olan TRIZ'ın uygulanmasının öğrencilerin yazma ve okuma becerilerini geliştirmedeki faydalarının araştırılmasıdır. TRIZ, öğrencilerin zihinlerini daha esnek ve yaratıcı hale getirmeye çalışan yenilikçi bir problem çözme yöntemidir. Yarı deneysel bir araştırma modeli çerçevesinde bir deney grubu ve bir kontrol grubu karşılaştırılmıştır. Deney grubunda, iki ay boyunca, yenilikçi bir öğretim yöntemi olan TRIZ çerçevesinde yeniden şekillendirilen İngilizce dersleri gerçekleştirilmiştir. Kontrol grubunda ise TRIZ yöntemi çerçevesinde şekillendirilen herhangi bir öğretim etkinliği gerçekleştirilmemiştir. TRIZ yönteminin öğrencilerin yazma ve okuma becerileri üzerindeki etkisini ölçmek, deney ve kontrol gruplarını karşılaştırmak amacıyla bir ön test ve bir son test kullanılmıştır. Ayrıca, her iki sınıftaki katılımcıları değerlendirmek, benzerlik ve farklılıklarını karşılaştırmak için gözlemler (öğrencilerin öğretmenle etkileşimleri ve kullanılan öğretim yöntemi hakkındaki görüşleri) yapılmıştır. İlgili çalışmanın bulguları, TRIZ'ın İngilizceyi yenilikçi bir şekilde öğretmek için etkili bir şekilde kullanılabileceğini, deney grubundaki öğrencilerin kontrol grubuna göre daha ilgili olduğunu ve daha iyi performans gösterdiğini ortaya koymuştur. TRIZ yöntemi çerçevesinde İngilizce öğretimine tabi tutulan öğrenciler, TRIZ yöntemi dâhilinde yeniden şekillendirilen İngilizce dersleri almayan kontrol grubu öğrencilerine göre okuma ve yazma becerilerinde daha yüksek performans göstermiştir. Ayrıca, deney grubundaki öğrencilerin okuma becerilerinden daha çok yazma becerilerini geliştirmeleri, TRIZ yönteminin yazma becerilerini geliştirmedeki etkinliğini ortaya koymaktadır. Dahası, TRIZ yönteminin sadece öğrencilerin test performansını artırmada değil, aynı zamanda iletişim becerilerini geliştirmede de faydalı olduğu tespit edilmiştir. Özetle, bu araştırma çerçevesinde, TRIZ yönteminin İngilizce derslerinde uygulamasının öğrencilerin okuma ve yazma becerilerini geliştirdiği ve İngiliz Dili Eğitimine yenilikçi bir bakış açısı getirilmesine yardımcı olabileceği sonucuna varılmıştır.

Anahtar Kelimeler: TRIZ, TRIZ Yöntemi, TRIZ İlkeleri, Okuma ve Yazma Becerileri, İnovasyon, Sorun Çözümü

ABSTRACT

TRIZ AS AN INNOVATIVE METHOD IN ENGLISH LANGUAGE TEACHING TO SUPPORT LEARNERS' READING AND WRITING SKILLS

ALKASEM, Batoul

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Learning English is important primarily because English is an international language. In addition, English plays an important role in educational contexts and serves as a gateway to the world. Education is a process that enables students to both acquire knowledge and develop their creative thinking skills. The aim of this study is to investigate the benefits of implementing TRIZ, which is an innovative method in foreign language teaching, in English lessons to improve students' writing and reading skills. TRIZ is an innovative method of problem-solving that tries to make students' minds more flexible and creative. An experimental group and a control group were compared within the framework of a quasi-experimental research design. In the experimental group, English lessons, reshaped within the framework of TRIZ, an innovative teaching method, were held for two months. In the control group, any teaching activities shaped within the framework of the TRIZ method were not carried out. A pre-test and a post-test were used to analyze the effectiveness of the TRIZ method on students' writing and reading skills and to compare the experimental and control groups. In addition, observations (students' interactions with the teacher and their views on the teaching method used) were made to evaluate the participants in both classes and to compare their similarities and differences. The findings of the present study revealed that TRIZ can be used effectively to teach English in an innovative way, students in the experimental group were more engaged and performed better than the control group. The students who were taught English within the framework of the TRIZ method showed higher performance in reading and writing skills than the students in the control group who did not take the English lessons reshaped within the TRIZ method. In addition, the fact that the students in the experimental group developed their writing skills more than their reading skills revealed the effectiveness of the TRIZ method in improving their writing skills. Moreover, the TRIZ method has been found to be beneficial not only in increasing students' test performance but also in improving their communication skills. In summary, within the framework of this research, it was concluded that the application of the TRIZ method in English lessons improves students' reading and writing skills and can help bring an innovative perspective to English Language Teaching.

Keywords: TRIZ, TRIZ Method, TRIZ Principles, Reading and Writing Skills, Innovation, Problem-solving.

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LIST OF ABBREVIATIONS

ARIZ: Algorithm of Inventive Problem Solving

TRIZ: Teoriya Resheniya Izobreatatelskikh Zadatch (in Russian)

TIPS: Theory of Inventive Problem Solving

ELT: English Language Teaching

IPS: Inventive Principles

IE: Innovation Education

CPS: Creative Problem Solving

PPI: Principle of Psychological Inertia

KET: English Key Test

SPSS: Statistical Package for the Social Sciences

TA: Thematic Analysis

CHAPTER I

INTRODUCTION

1.1. Presentation

This chapter presents the research problem. It highlights the significance and purpose of the study. It introduces a statement of the research questions and explains the study limitations and assumptions. The study's key terms are defined, and their abbreviations are included.

1.2. Statement of the Problem

English is a global language, and increasingly more people are learning it. As English is an international language, it is integrated into the education system in many countries. For example, although Turkey is officially a monolingual country, English is considered a unique, additional language (Doğançay-Aktuna, 1998). Learning English is very important because it plays an important role in an individual's life in many respects, including communication, expressing one's thoughts and feelings, and acquiring new knowledge in a global context. Indeed, the English language is widely used in many parts of life, and therefore it is taught as a foreign language in schools all over the world from an early age (Broughton et al, 2003).

Oliver (2016) stated that teaching English as a foreign language requires the use of various methods and techniques. Indeed, a range of different teaching methods has been developed by many professors and researchers for over a century, including innovative methods. Although it is recognised that learning English language is an ongoing process which requires constant improvement, the most popular techniques and methods used in English language education are often traditional and un-innovative (İülk, 2011). Prior to this century, the methodologies of language teaching varied between two approaches; the first approach focused on using language for communication, while the second approach focused on analyzing language techniques,

including learning grammatical rules (Matus, 2011). The current study investigates the use of TRIZ - a method of inventive problem solving that contributes to making learners' minds more flexible and creative - as an innovative method of teaching English for the purpose of increasing learners' reading and writing academic achievements at an intermediate school level in Gaziantep – Turkey.

The English language is one's gate into the world. Interacting with others depends on understanding each other and expressing ourselves (Çaycı, 2006); this requires us to develop our language skills (writing, speaking, reading, and listening). These skills interact with each other, and we can learn them through education. Although listening and speaking skills can be acquired outside of school, reading and writing skills are usually obtained through formal education (Yaşar, 2007). Reading is crucial for bringing people from different cultures together; it is a way of learning that involves analyzing and evaluating a text's emotional content (Yıldırım, Demir, & Kutlu, 2020). Writing is a narrative skill acquired through formal education, and it is linked to reading skills (MoNE, 2019). According to Sadiku (2015), reading and writing are two skills that are intimately linked; they are essential skills through which learners are able to interact and communicate effectively. Due to this, learners should be given the opportunity to support their reading and writing skills, often through gradual exposure to more challenging reading materials and writing tasks.

Reading and writing in a foreign language have myriad benefits. Improved reading skills can also develop individuals' cognitive and physiological skills. Improved reading skills have also been found to be linked to increased productivity. A study by Schwerdt and Wiederhold (2019), it was found that individuals who have achieved a suitable degree of reading ability invariably had higher educational outcomes which led them to have a favorable impact on the national economy. Cheng and Matthews (2016) also emphasized that reading skills are crucial for strengthening other language skills, such as writing. Improved writing skills are also greatly beneficial because they strengthen learners' intellectual abilities, for example thinking development, language effectiveness, and communication. Various studies have found that people's performance in various fields is strongly related to their writing abilities (Graham, 2007). Accordingly, improving both students' writing and reading skills

should be a key component of English language learning. In order to achieve these goals, innovative learning methods by use of the teacher and students are vital (Subramani, 2018). There are many different teaching techniques for learning English language skills, and these methods and tools are constantly built upon. Although the techniques of teaching a foreign language are constantly evolving, the key aim for all methods is to improve the learners' skills.

The rapid improvement of language teaching and the rising accountability of learning and teaching quality has created a need to develop teachers' competencies and search for new methods for teaching (Kelly, 2011). There are different purposes of education, which include a social purpose, cultural purpose, vocational purpose, moral purpose, and intellectual purpose. For example, in terms of intellectual purpose, teachers aim to help students learn, think and research creatively to become distinct problem solvers. This is important because individuals often struggle to solve complex problems. Teachers and community leaders ask questions such as "How can we teach children to be creative, innovative and improve their thinking process so they will become creative members of society?". Although often use traditional methods due to the existing curriculums, students respond well to innovative and effective methods that may help them increase and enhance their writing and reading skills in a creative way (Faraj, 2017).

The goal of education is not only to provide the learners with information but also to develop their capacity for creative thinking and awareness of ever-advancing information. Researchers have analyzed the most effective teaching methods, which include TRIZ (Ekmekci & Nebati, 2019). TRIZ is a powerful method that helps learners to tackle problems by inventing innovative solutions (Gadd, 2019). Kaplan (1996) stated that the use of TRIZ influences the neural networks within the brain, allowing individuals to become more inventive and approach issues from distinctive points. Indeed, Maan (2002) highlighted that TRIZ can help learners to replace old, chaotic methods of solving problems with organized, innovative methods.

Despite the benefits of TRIZ, only a few of these studies investigate the use of TRIZ in English language teaching (Gadd, 2019). Between 1994 and 1995, the first programs of TRIZ were introduced in Western European and US universities. Over time, these programs of TRIZ disappeared in some universities, remained in others,

and developed further in others. By the end of 2013, TRIZ was included in educational programs in various degree subjects in over 120 universities globally (Wits, Tom, & Valeri, 2010). Although some of these education programs consisted of only 8 hours lessons, students were given an opportunity to learn about the basic principles and usefulness of TRIZ. As detailed by the European TRIZ Association (ETRIA) (2010), nowadays roughly 50 universities worldwide offer some form of TRIZ education at various levels. Most of them focus either on a few awareness-level courses on TRIZ (e.g., 2-4 hours at the University of Groningen, The Netherlands) or they offer an introduction on TRIZ learning with more than two classical TRIZ tools (e.g., 30 hours at the Technical University of Liberec, Czech Republic). Cavallucci (2009) found in his study in 2009 that, on average, college, and university education of TRIZ was based on programs between 0 and 40 hours.

Despite this increase in TRIZ method in education, there still lacks detail on implementing them in English language learning. This study aims to address this gap by implementing the use of TRIZ as an innovative and creative method in English language teaching in order to support learners' reading and writing skills at an intermediate level of an Iraqi school in Gaziantep – Turkey. Vincent (2000) suggests that the TRIZ method develops learners' creative abilities in solving problems faced in their studies; the TRIZ method aims to make innovation a systematic process through using a set of creative principles and strategies. Therefore, implementing TRIZ method in English language teaching could increase learners' ability to solve any problem. Belski (2007) stated that learning TRIZ appears to be useful for acquiring knowledge and improving problem-solving skills.

1.3. Significance of the Study

Innovation education is a type of modern education pattern through which learners become independent, creative, and professional (Anusca Ferrari, 2009). Johnson (2019) found that teaching students using innovative and creative methods helps to develop their capabilities and makes them more creative in using their knowledge and skills. This implementation of innovative methods – such as TRIZ – consists of teaching students how to solve problems in a structured manner. TRIZ has a structured methodology for solving problems creatively in all fields and our society

(Cerit, 2014). Today, most agree that innovation knowledge and the ability to create and innovate are the key capabilities in all aspects of our life.

Creative education plays an important role in bringing about positive changes through building the cognitive mindset such as through facts, knowledge, concepts, and principles (OECD, 2016). It also helps to develop learners' skills-based performance such as thinking, analyzing skills, and problem-solving (Snyder, 2008). TRIZ is a unique method that contributes to problem-solving through the methodology of inventive problem solving (Savransky, 2000). TRIZ is an innovative method based on many tools including brainstorming, mind mapping, morphological analysis, and lateral thinking. These tools help learners to both understand and solve their problems during studying (Gadd, 2011). Therefore, the use of TRIZ in education helps learners to generate better ideas and helps teachers use creative and innovative teaching methods.

Learners constantly face problems throughout their education and through life, and they need to solve them constantly. Often, there are certain methods for solving problems, which individuals follow in a specific context. However, people may occasionally feel that the guidelines they follow are insufficient. Learners may also face new challenges for which they must devise their own solutions. According to Astronomy (2013), problem-solving is a cognitive process in which one must determine the problem and then discover a solution to that problem. A succession of procedures should be followed systematically, even though some steps may be omitted or repeated numerous times depending on the types of challenges (Jani, 2013). There are various problem-solving techniques and methods; one of these is the TRIZ method. TRIZ was built on the idea that "there are universal principles of invention that are the fundamental of creative innovation that develops technology" (Jani, 2013, p.83), and this is now commonly used to solve complex innovative challenges (Rivin, 2011). Sire, Haeffel, and Dubois (2012) noted that the TRIZ method engages students and helps them solve problems by allowing them to look for the knowledge they need. As a result, the TRIZ method implementation in education aids learners in solving their problems and challenges using new method.

The goal of this study is to investigate the advantages of TRIZ implementing TRIZ as an innovative method in English language teaching, and to analyze its efficiency in improving learners' academic achievements. This study will examine if TRIZ improves learners' reading and writing achievements through a standardized test. Crucially, the use of the TRIZ method in English language teaching may have better outcomes for students when compared to more traditional methods. This study is novel, and it provides insight into the use of TRIZ in English learning for the first time. The outcomes of this study will contribute to understanding both how to develop learners' reading and writing achievements and also how to enhance teachers' teaching methods. This study will contribute to identifying reading and writing challenges which learners encounter at the level of recognition, understanding, and suggested solutions.

Overall, there are many potential benefits of using the TRIZ method for learning the English language, and this study aims to examine how this method can benefit students of English and beyond.

1.4. Aim of the Study

The aim of this study is to investigate the effects of TRIZ implementation, as an innovative method on foreign language teaching and learning, in terms of increasing writing and reading skills for learners. The results of this study should be part of enhancing writing and reading teaching strategies; the TRIZ method may contribute to supporting innovative education by providing methodology and solving questions methods (Cerit, 2014).

This study aims to investigate if learners' writing and reading skills – measured by a standardized test – improve when TRIZ method is implemented. The TRIZ method provides learners with various tools to solve problems, and it is crucial that they have the resources to draw upon the appropriate tool when doing so. The result of this study will provide new insight into English language teaching by using TRIZ method and strategy.

1.5. Research Questions

The aim of this study is to answer the following research questions:

Research Question 1: How useful do TRIZ be for teaching the English language?

Research Question 2: Do learners who utilize TRIZ as an innovative method perform better on a standardized reading and writing test than those who are not?

Research Question 3: Does TRIZ affect classroom interaction?

1.6. Assumptions

The research was conducted with eighth-grade students at the Iraqi school in Gaziantep. In order to evaluate how beneficial TRIZ was for teaching the English language and enhancing learners' writing and reading skills, a quasi-experimental research method was used in this study.

It is assumed that the TRIZ method is an innovative way that will be more useful for English teaching than traditional methods. Additionally, this study works with students whose classes are segregated by gender; however, it is assumed that there is no difference in male and female performance according to the TRIZ method (Jaeger, 1998). It is therefore presumed that conclusions of this study will be relevant and true in wider society.

1.7. Limitation

There are various limitations to the research. Firstly, as the study was conducted at a single education institution, the findings may not be applicable to other situations. Secondly, only students of eighth grade in the Iraqi school participated in the research, which may mean that the findings cannot be applicable to the wider student body. Thirdly, the sample size was relatively small, which increases the potential margins of error. Finally, this study is considered novel that there is not a lot of prior research on TRIZ in the English language field.

1.8. Definitions of the Key Terms

The terms are important because they will help the readers to understand all the provided information better and help readers to comprehend them well.

Innovative method: An implementation of ideas through following a plan in order to introduce a new service or improve a service realizing value (Schumpeter, 1983).

Writing Skills: To convey ideas, thoughts, and feeling to others through writing; in doing so, helping individuals to express their thoughts into meaningful words and to interact with each other (Utami, 2011-2012).

Reading Skills: A process through which individuals can evaluate sentences on a page through understanding words and constructing an overall meaning (Sandhu, 2016).

Standardized Test: A test which administrated in a consistent way for all individuals participating, with regards to the test questions, test duration, and scoring methods (Burrows, 2020).



CHAPTER II

LITERATURE REVIEW

2.1. Presentation

This chapter begins with a review of the available literature on the TRIZ method and the use of TRIZ in education. It then concentrates on the principles of TRIZ as a systematic method. Finally, the results of previous research on implementing TRIZ in education will be discussed to explore the possible outcomes of the study.

2.2. TRIZ

TRIZ is a Russian theory which was developed in 1946 by Genrich Altshuller and his colleague in the 'Inventions Inspection'. It is an abbreviation of the Russian phrase 'Teoriya Resheniya Izobretatelskikh Zadatch', which is translated into English as the 'Theory of Inventive Problem Solving' (Barry, Domb, & Slocum, 2010). Altshuller and his colleague created the theory because they realized that traditional problem solving led to contractions within solutions, which they termed the 'technical contradiction'. Indeed, prior to the invention of TRIZ, people used the same solution for different problems, and most organizations tended to recycle old solutions as opposed to thinking creatively.

The first draft of TRIZ was published in 1956 under the title 'On the Psychology of Inventive Creation' (Altshuller & Shapiro, 1956). After further research and testing of the method, Altshuller convinced the Inventors Society to establish the first TRIZ facility, which they called 'The Public Lab for Inventive Creations'. In 1986, Altshuller moved his attention away from technical TRIZ and he developed a version of TRIZ for children which was tested in many schools (Soukhov, 2008). In 1998, Oxford Creativity - which was known later as Oxford TRIZ - was launched. This used new teaching and learning styles to make TRIZ tools and principles more

accessible to everyone. The term Oxford TRIZ was trademarked in 2013 (Oxford Creativity, 2013). Since, over 2000 pieces of research have focused on TRIZ, and helped to build upon the framework for innovative solving problems.

TRIZ is often considered as a method for creative problem solving; one which aims to promote ideas and increase creativity. Oliver Mayer (2015) stated that TRIZ is a systematic method through which learners can understand and define challenging problems; its goal is to bring learners out of the usual education pattern. Difficult problems require inventive and creative solutions, and TRIZ provides many strategies and materials for finding these solutions. TRIZ is a problem-solving method that is based on logic, data, and research rather than on pure insight. It requires an in-depth understanding of the contradictions within the problem, which are then, used to find the solution. Through TRIZ method and instructions, learners could be inspired to be creative and solve their problems (Chung, 2013).

TRIZ is a dynamic technique for creating systematic innovation and enhancing one's thinking processes, and it is considered as teaching method to solve unusual problems or tasks. Nakagawa (2010) witnessed the benefits of implementing TRIZ method in engineering and believed that it could enhance both learning and teaching in other subjects. Thus, he called for the introduction of TRIZ method at the elementary, middle, and higher levels of education. Indeed, research has shown numerous benefits of using TRIZ in education including helping students to creatively problem solve and helping teachers adapt learning methods to suit students' interests and maturity (Birdi, 2012). TRIZ not only works through helping learners to find solutions to specific problems, but it also works by enlarging the learners' patterns of thought in such a way that studying calculus does in the science field. Overall, it contributes to making the minds of learners more flexible and creative (Kaplan, 1996).

According to a study in Twente University, TRIZ was found to be a powerful method within the institution which, motivated students to find innovative solutions during the process of product development (Wits, Tom, & Valeri, 2010). In addition, nearly 50 universities across the world apply some form of TRIZ in education at several levels and fields. Therefore, TRIZ has been integrated into education to help students to develop their achievements. (Wits & Wessel, 2010). Using TRIZ affects the learners' minds and help them to become more creative and understand how to deal

with problems from different angles. Altshuller (1984) was interested in inventive problems that are defined as a problem without a clear solution or a problem that its known solution creates another problem. Also, he desired to have results that were not rely on personal creativity, like brainstorming. TRIZ delivers method and tools which help people to avoid errors during a process of problem-solving (Zhang K. Y., 2000). TRIZ theory was built depending on three principles that are ideality, contradictions, and system approach. Ideality refers to the ideal design, contradictions help in solving problems and system approach ensures a systematic structure to solutions (Cerit, 2014).

2.3. TRIZ Methodology

In Turkey, the TRIZ methodology method is used to describe a ‘Creative Problem-Solving Method’ (Nebati, 2019). Altshuller, developed the TRIZ concept based more on technology than on psychological elements (Lindemann, 2012). He did this by observing 40.000 research patents and analyzing the laws for the development of the technical system. Altshuller wished to identify standard method for solving problems, and thus created 5-level solutions:

Level 1: ‘Simple Solutions’ which are personal strategies to solving problems (32% of patents).

Level 2: ‘Improvements’ which refers to the solutions provided by Altshuller, and those which improved the current problem-solving system (45% of patents).

Level 3: ‘Innovation inside of Studied Area’ which refers to the improvement and advances that were brought on by the current system (18% of patents).

Level 4: ‘Innovation outside of Studied Area’ which refers to solutions found through patents. These solutions performed the main functions of the current system (4% of patents).

Level 5: ‘Extraordinary’ which occurs when new knowledge results in a different solution to a problem (1% of patents).

The advantage of TRIZ is understanding how contradictions, physical or technical, can be solved through using innovative solutions. The TRIZ method draws upon analytical

tools that are important to solving problems. These tools are based on knowledge which is important for system transformation and its theoretical basis. The aim of using the TRIZ method is to identify the best solution to a problem, and this depends on four factors:

- 1- Contradiction
- 2- Perfection
- 3- Functionality
- 4- Using resources

Altshuller (1946) defined TRIZ through using four steps in the light of previous factors:

- 1- Defining the problem
- 2- Linking and comparing the general problem with TRIZ' problems
- 3- Finding TRIZ solutions
- 4- Developing the ideal solution for the problem

TRIZ uses more than one method and one tool (Fig. 1), and it provides a well-structured and inventive problem-solving process. Altshuller created this novel method through analyzing many patents, eliminating their subject matter, and identifying the common problem-solving processes. He found that the same problem was solved using the same solution repeatedly. These TRIZ researchers summarized the inventive practice principles and put them in a general problem-solving structure (Maan, 2002). Loebmann (2002) also highlighted that using the TRIZ method can help individuals to overcome subject-specific barriers by allowing researchers to use a general, broad, and creative solutions. Resultantly, through comparison of the TRIZ problems and TRIZ solutions, a solution can be generated for a specific problem. TRIZ not only became a reliable process in ensuring innovation, but it also helped to avoid ineffective solutions for problem-solving through providing a systematic method. Finally, Nebati (2019) suggests that the TRIZ methodology could be integrated with

other, more traditional method in order to solve problems more collaboratively and effectively.



Figure 1. *Tools of TRIZ*

The TRIZ methodology divides the innovation process into three stages: analyzing tasks, solving challenges, and selecting solution concepts (Adunka, 2013). Altshuller evolved a set of specific tools to support these three stages of the innovation process (Fig. 2).

Analysis of tasks		Solving of challenges		Selection of solution concepts
- Innovation Situation Questionnaire - Resources-Checklist (RC) - Ideality (IFR) - Theory of Technical Systems - Technology Evolution - Trends of Engineering System Evolution (TESE) - Multi-Screen Diagram / 9 Windows - Functional Benchmarking ABC Analysis - Flow Analysis Component and Structural Analysis	- Function Analysis - Incremental Improvement - Radical Trimming - Value Analysis - Function Stealing - Patent analysis and adaption - Trimming (Ideal Functional Modeling) - Cause-effect Analysis - Formulation of key problems - Alternative System Merging (Feature Transfer)	- Effects Data Base - Function-Oriented Search - Clone Problems - Open Innovation - Engineering Contradiction 40 Inventive Principles for Resolving Contradictions - Physical Contradiction	4 Separation Principles - Substance-Field Analysis 76 Inventive Standards - Multi-Screen Approach / 9 Windows - Operator Size/Time/Cost - Modeling with Miniature Dwarfs - Galfmorbis - ARIZ Algorithm	- Scientific Database - Prioritize solutions - Concretize solutions - Solving of Secondary Problems - Anticipatory Failure Determination (AFD) - Super-Effect Analysis - Validation - Inverse Function-Oriented Search

Figure 2. *TRIZ Process of Innovation with its Assigned Methods*

2.4. Contradictions and TRIZ Principles

The TRIZ theory both highlights contradictions faced when solving problems and provides a creative Structure for overcoming these contradictions. This is important because contradictions may be damaging to the solving a problem because they can make sub-systems fail (Lin, 2011).

Montecchi and Russo (2015) noted that TRIZ recognizes two types of contradiction: physical – relating to contradictory characteristics within the system – and technical – relating to subsystems in the system having contradictory requirements. Physical contradictions refer to the existence of opposite requirements, for example that a subject should be complex and have many features, whilst also being simple and easy to be learn at the same time. Physical contradictions can be solved through TRIZ Separation Principles. Separation Principles technique comes from TRIZ, and it can help to overcome a physical conflict with minimum or no trade-offs. (Samuel, n.d.). By contrast, technical contradictions refer to the difficulty in reaching the desired state because there is something that prevents something else from happening; for example, training is comprehensive, but it prevents students from doing their assignments. Problems that include contradictions can be solved by one of two ways; firstly, by making tradeoffs, and secondly by reframing the objectives in the form of the contradiction and using this to overcome the contradiction. TRIZ attempts to eliminate the contradictions instead of making tradeoffs (Albers, 2011).

Altshuller discovered 40 Inventive Principles (IPs) in TRIZ. These principles help individuals along the path of solving a problem or any technical contradictions; for example, from breaking down the problem (principle 1. Segmentation) to considering feedback (principle 23. Feedback). Maan (1998) highlighted that these broad IPs are useful for helping innovators solve problems in exciting and effective ways. Altshuller (2013) developed these principles further so that they could be used to effectively analyze resources and overcome technical contradictions within problems. One of his aims in doing so was to increase the ideality of a technical system. According to TRIZ Journal (n.d.), 40 principles are necessary because they provide a method to solve a broad range of problems; so much so that a compromise does not have to be made. However, it was suggested to use the principles randomly in the aim of keeping people' thinking independent.

TRIZ provides problem solvers with various tools and techniques; 40 IPs are part of these tools, and they are used to eliminate contradiction of problems (Cong & Tong, 2008). Maan et al. (1999) stated that the TRIZ method is more effective at removing contradictions, and making compromises, than the other traditional methods.

Each IP is composed of sub-principles which extend the different views of each principle.

TRIZ was originally implemented in the engineering field and therefore its principles and tools have been used to offer innovative solutions to technical issues. Despite this, TRIZ can also be used to solve problems that are not technical (Rahman, 2014). In either instance, there are three stages for solving a problem or creating a solution, the first stage is defining the problem, the second stage is generating a solution and the third stage is evaluating the solutions. Zhang, Chai and Tan (2005) noted that this 3-stage method of using 40 IPs to solve technical problems is robust and easier to recognize than solving non-technical problems that are not tangible and abstract.

2.5. English Language Teaching

The world is becoming more globalized, and communication and foreign language play a vital role for individuals adapting to this globalization. The English language is considered the language of international communication. The methods of learning and teaching a foreign language are very broad and varied. Tebabal and Kahssay (2011) stated that the main aim of teaching at any education level is to effectively improve learners' skills set and their ability to develop skills in the future. Diaz Merino (2010) is one of many academics who believe that learning English should not be restricted to traditional teaching methods – for example, learning just the language's structure and tenses – and there should also be a focus on the application of the language beyond the classroom this is because traditional teaching methods depend on educators' ability to explain topics through a textbook; a method which has been critiqued for not actively engaging learners (Nipa & Kermanshachi, 2018). Instead, nontraditional methods of teaching – such as TRIZ - may motivate learners' curiosity and creativity as well as encourage them to share class activities and tasks (Taajamaa, et al., 2013). In both methods, teachers are responsible for following up on the students' learning processes, including ensuring that learning resources are suitable, accessible, and relevant to the learning needs of students (Waithaka, 1987). Therefore, the success of teaching depends partially on good planning, quality of materials, and teachers' mastery of the subject taught (Elizabeth, 2004). Knowledge and application of certain methods and materials help teachers to teach the same

subject effectively (Jeschke & Kuhn, 2021). There are various methods teachers and learners may draw upon. Effective teaching depends on certain techniques; some of these techniques will be explained below briefly:

Imitation is a behavior that involves copying another person's behavior or activities. It is considered a fundamental technique in learning new information as well as learning a new language. For example, children acquire their mother tongue at an early age through imitation (Ingersoll, 2008).

Practice and Drill is a technique which includes the repetitive practice of an activity or skill. It is an effective technique for teachers to use when students must grasp – and cement – a new concept or new skills (Lim C.S., 2012).

Oral Approach - also known as situational language teaching - is a method of language instruction that is based on speech, structures, and a focus on a particular set of vocabulary. As language relies more upon the tongue and ears than on sight, oral activities should be prioritized. Consequently, if learners are good at speaking, they will be good at reading and writing (Twaddell, 1960).

Motivation/Interest is the process of initiating, guiding, and maintaining goal-oriented behaviors. It pushes a person to take action, for example, to read a book in order to learn something new (Reeve, 2015). Indeed, learning a language requires significant interest from the learner.

Natural Way of Teaching-Learning is a language teaching method based on the observation and interpretation of how learners acquire first and second languages. Instead of focusing on the syntax of a sentence, this method emphasizes input, comprehension, and meaningful communication (Krashen, 1983).

Context and Situation means that the physical, chronological, geographical, and social context in which language interactions take place is important (Context., n.d.). For example, Students must learn vocabularies in the context of a sentence which they may use in their everyday lives.

Balanced Approach suggests that there is an ideal combination between whole language and phonics. Teachers should place equal emphasis on all skills of language because each has its own value (Richardson, 2016).

In order to be an effective teacher, one must be able to incorporate creativity into their lessons. Fisher (2004) found that this creativity is crucial because it helps to improve the learners' skills. In language teaching, Maley (1997) emphasized that using a variety of different literary and non-literary tools can elicit creative thinking and increase one's ability to make a creative connection. TRIZ is a method that is based on data, logic, research; TRIZ helps learners to think clearly and to generate innovative ideas (Karen, 2014). Overall, TRIZ helps learners to keep focused on relevant details and to see the big picture, which improves their achievements. Indeed, methods that are similar to the TRIZ principles have been integrated into English language teaching methodology; some of the TRIZ principles are related to problem-solving techniques. For example, some of the TRIZ principles depend on assigning tasks to students so that they can properly understand and use the target language to solve problems effectively.

2.6. Education

Education is a method that aims to facilitate the process of acquiring knowledge, values, skills, morals, habits among many other things. Education is a crucial part of every society because it aids country's social and economic growth (Jaradat & Qablan, 2010). Indeed, Saviotti, Pyka and Jun (2016) highlighted that investment in education can result in economic growth. In order to increase the educational attainment of citizens, a range of methods can be employed. In general, teachers have the responsibility of delivering a high quality of education. Therefore, qualified teachers should be present in every class and school (Wolk, 2011).

Education is different from schooling as education broadly means gaining knowledge and information formally or informally. On the other hand, schooling refers to the primary and secondary stages of formal, restricted education that takes place in school (Postman, 1995). The word 'education' is derived from the Latin word "Educare" which means to bring up, develop, and shape an individual's innovation

and capability (Thorndike, 2006). Education should train individuals to be more quick, determined, and innovative with their thinking (Martin Luther King Jr., 1947).

Education needs to follow changes and advances in society, and it is important to integrate new technology into the field. Innovation in education should make learners more creative and able to gain skills (Seechaliao1, 2017). Therefore, it is essential to integrate innovative methods of teaching into education. Sanrach (2019) argued that integrating innovative methods help learners to understand the lesson content better and develops their learning skills.

2.7. TRIZ in Education

TRIZ was first used in education in engineering and later into other subjects, for example business, and science schools' programs in order to increase creativity and innovation in the classroom. Altshuller (1988) noted that if a person starts learning TRIZ and developing creative thinking at an early age, they will have the opportunity to resist psychological inertia during life. The European TRIZ Association (2010) reported that almost 50 universities around the world provide some form of TRIZ education at different levels. Some of these universities focus on the awareness level on TRIZ, for example the University of Groningen, The Netherlands. The other universities provide introductory TRIZ learning with some classical TRIZ tools, for example the Technical University of Liberec, Czech Republic. Belski (2007) stated that learning TRIZ at university is useful not only for gaining knowledge and skills but also for developing general problem-solving skills. Also, he noted that 97% of students who finished the TRIZ course were more confident and had the ability to solve any problem.

The 'knowledge society' is a concept that appeared in Europe as a reaction against the inability of traditional education to fulfill the demands of society (Tomasi, 2009). Longworth (1999) defined the concept of the knowledge society as the ability of individuals to independently learn new information and creatively apply it to other situations in order to solve problems. However, Lipman (2003) argued that education needed to be reformed because it did not satisfy the mission of preparing students for life in the knowledge society. Using TRIZ in education can help overcome this barrier,

and reform existing methods. This integration of TRIZ can be achieved either by teaching: TRIZ as a separate subject or integrating the TRIZ method in other subjects.

The traditional method of planning educational content is achieved through the following steps (Fig. 3):

- A school is responsible for developing the educational program and deciding on the subjects taken.
- The government approves the subject standards.
- Teachers are responsible for developing the program of subjects, including the necessary teaching materials to achieve the targets stated in the program.

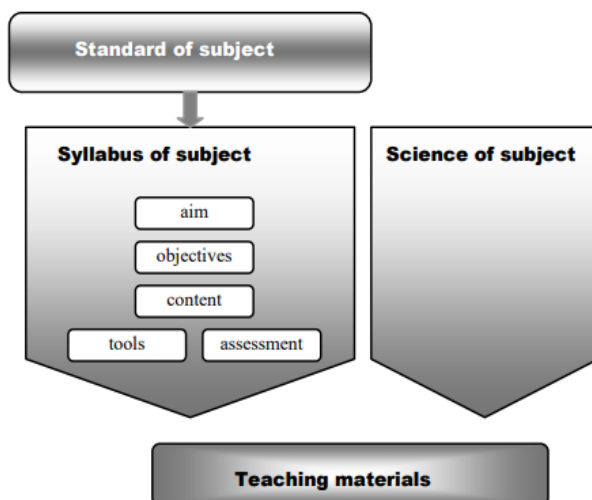


Figure 3. *Traditional Methods of Education Content.*

On the other hand, schools that are planning to teach TRIZ to their student integrate TRIZ skills or teaching materials (Tomasi, 2009). In comparison with classical subjects, there is a lack of programs or standards for TRIZ as a subject. However, it is crucial that TRIZ programs are defined with requirements in the system of education in order to satisfy the process of teaching and learning.

The TRIZ method consists of two major parts: the first is a theory about inventive problem solving, and the second is about developing a technical system to employ TRIZ. As TRIZ is used in interdisciplinary fields on a vast range of specific problems, the method is developing continuously (Wits, Vaneker, & Souchkov, 2015).

In order to provide some structure to the TRIZ system, it is broken down into five parts:

- 1- Innovative thinking and problem analysis methods,
- 2- Technical system evolution,
- 3- Technical system solution,
- 4- Common solution to innovation question,
- 5- Solution algorithm of inventing question.

According to Jiang (2010), for innovative education, both the teacher and student should be trained to draw upon a structured method of problem-solving. Teachers will be trained through a short course followed by actual teaching and continuous learning through frequent contact with TRIZ experts. Prior to the training, several considerations must be taken into account in order to determine realistic innovative educational goals. These include: the materials necessary; the local economic development needs; the school's socio-political situation; the teachers' ability and resources; and the teaching management. Accordingly, prior to the implementation of TRIZ in education in a school depends on the:

- 1- Abilities to be measured,
- 2- Equipment owned,
- 3- Possible test material,
- 4- Relationships between three that are most effective.

Learning TRIZ is essential not only at the lower-and middle-levels of education, but also at university (Nakagawa, 2010). Students in these situations should be taught how to handle a specific problem following many steps including:

- 1- Basic methods of creative thinking,
- 2- Basic principles of system, functions, causes and effects.
- 3- Basic steps of planning, designing, and development.
- 4- Handling individual technical problems.

Despite the need for TRIZ education, teachers often face problems using TRIZ method because they do not have sufficient knowledge or training. Therefore, it is particularly important for young teachers and students to meet experts to learn about

the method. Teachers could teach students and learn at the same time through expertise of the TRIZ expert. Thus, implementing TRIZ in education depends on two levels: the first is teaching teachers; the second is to transfer know-how to students.

2.8. Innovation Education

TRIZ method is employed in a form of modern education called Innovation Education (IE). Here, innovation refers to a new idea that is created by a systematic approach and then tested and developed through research (Songkhram, 2013). IE emerged in Iceland, and the aims of IE are two-fold 1991 (Thorsteinson, 2002). Firstly, IE aims to educate children holistically through a structured system that referred to ideation skills within the innovation context (Borg, 2006). Secondly, IE strengthens individuals' innovation skill and their ability to independently respond to a new situations and challenges (Thorsteinsson, 2012). IE aims to help students apply what they have learned in the classroom, search for their educational needs and issues, and produce suitable solutions or improve known solutions. It is important to raise the spirit of innovation and creativity of students for many reasons, including developing their scientific research; increasing students' innovativeness; and strengthening their independent thinking. There is a range of common procedures used to increase educational innovation, for example identifying the problem, identifying the goal, specifying the limitations, creating, and developing the educational innovation framework, and studying the effects of disseminating this research (Kaewpradit, 2002).

Innovation in education is very important because education contributes to creating a sustainable future for learners. The aim of any invention is to produce something different - in terms the quality or quantity - from what we have previously. Therefore, innovation is considered an instrument of instigating positive change. Both academics and politicians in the USA recognize that education methods must be developed to include innovation (Wildavsky, 2012). Indeed, Whattananarong (2011) highlighted the need for education to integrate new sources of information and communication which will help in solving educational problems efficiently. The system of integrating innovation in education should be both effective and efficient through using the available resources; these resources could be intangible resources

such as funding or technology facilities, or human resources (teachers, technical-administrative workers, and assistance) (Cornali, 2012). According to the Ministry of Education in Thailand (1993), educational innovation is divided into six types:

- 1- Instructional technique/pedagogy,
- 2- Media and educational technology,
- 3- Curriculum,
- 4- Measurement and evaluation,
- 5- Administration and management,
- 6- Educational system.

Zoltin (1998) stated that existing college and university programs often increase the innovation among students, which improves their overall performance and educational attainment. Adding to this, Schweizer (2002) found that students who were taught using TRIZ method developed their ability to think. In light of this evidence, it is crucial to integrate TRIZ into the education system because it systematically results in higher levels of innovation inside the classroom.

2.9. Creative Problem-Solving (CPS)

Solving a problem refers to moving from an initial situation to a desirable one. To solve any problem effectively, it is important to thoroughly understand the problem and then try to solve it through non-routine solutions, such as Creative Problem-Solving (CPS). CPS was developed by Alex F. Osborn and built on by psychologist Sidney J. Parnes. Famously, CPS has been used to overcome the Principle of Psychological Inertia (PPI), which highlighted that it is the nature of human beings to resist change. Often, when people are guided by habits rather than thinking outside the box, they are hesitant about new ideas and ways of thinking. It is useful in a case such as PPI to draw upon more creative methods of solving problems, in order to avoid the problems/hesitancies faced when using the traditional approach (Kowalick, 1998).

Understanding the background of the situation is particularly important to CPS because it can help another problem solver to understand the same problem in a completely new light. This level of information about the problem, in turn, allows the problem solvers to create more effective solutions (Pokhrel, 2013). The aim of using

CPS methods and tools is to organize thoughts and divide the problem into many parts to which allows for a resolution of the problems faced by the learners. There are several creative problem-solving techniques, for example brainstorming, mind mapping, scamper, and TRIZ. The TRIZ method relies on logic and past experiences more than on unpredictable thinking. Initially, TRIZ was used as a complementary method to the traditional, structured problem-solving method because the traditional and TRIZ methods have many common steps. Yeoh (2009) proved that using TRIZ and the traditional problem-solving methods to solve problems resulted in greater innovation results (Fig. 4).

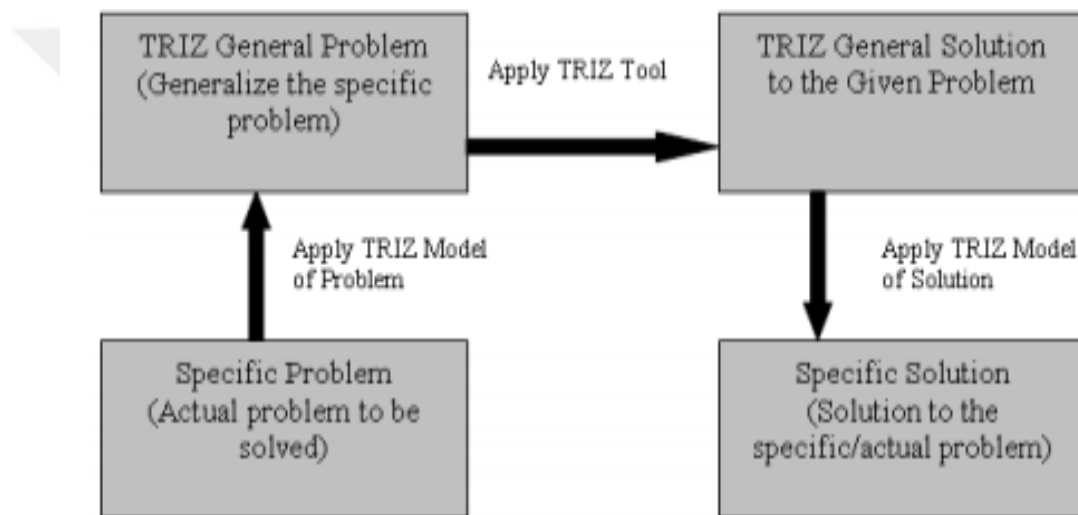


Figure 4 *TRIZ's Method of Solving a Problem*

The TRIZ problem-solving method is evidently different from traditional ones in the way that TRIZ converts a specific problem into a TRIZ general problem, to remodel it and search for broad solutions (Yeoh, Jin, & Song, 2009).

CHAPTER III

METHODOLOGY

3.1. Presentation

This chapter discusses the research design methods, including the research method, participants, and the procedures for collecting and analyzing the study's data. The reliability and validity of the data collection instruments will also be presented.

3.2. Research Design

This study was conducted using a quasi-experimental study. Quasi-experimental designs are particularly beneficial for evaluating the cause-effect relationship between the independent and dependent variables in education processes (Gribbons, 1996). Loewen and Plonsky (2016) defined the independent variable as the variable that influences the end outcomes, and the dependent variable as the variable that is influenced. Among various types of experimental designs, there are two general categories: true experimental design and non-experimental design. Gravetter (2018) stated that a true experimental design includes manipulating one or more independent variables, and the dependent variables are attentively measured through pre-and-post testing. A true experimental design also is distinguished by random assignment, in which participants are assigned to the control and experimental conditions at random using a randomization technique (Nunan, 1992). The main difference that distinguishes true experimental design from non-experimental design is the lack of a completely random assignment. Quasi-experimental designs have several elements of experimental designs but vary in a few ways. For example, a comparison group is predetermined to be equivalent to the treatment group in important aspects, such as the eligibility for the same services or being in the same school vogue (Rossi & Freeman, 1989). Therefore, researchers must ensure that the comparison group meets specific criteria in order to obtain more explicit conclusions about the causal relationship between two variables through using quasi-experimental design (Marsden, 2012).

Kelly (2008) stated that the learning environment in quasi-experimental study is made up of independent features that could be controlled and manipulated by the researcher.

In this study, the dependent variable is the learners' performance including their reading and writing academic achievements. This is measure through a specific standardized reading and writing test. The study's independent variable is the students' exposure to the lessons, which use TRIZ as an innovative form of problem solving. The control and the experimental groups were not selected at random; this research uses existing gender-segregated classes. The participants will be given the Cambridge' s Key English Test (2021) before and after the intervention, to examine if the TRIZ method is useful as an innovative method of education to support the students during their education journey.

Two types of books are commonly used for teaching English at the intermediate level. These are 'English for Iraq' and 'Metro'. 'English for Iraq' is a part of an international series which was published by Terry O'Neill and Peter Snow in 2013/2014 (Yasseen, 2019). This textbook is intended specifically for pupils and teachers at schools in the Iraq republic. It contains a communicative approach to grammar, vocabulary, listening, pronunciation, speaking, reading, writing, culture, function, and notions skills. The basic aim of this textbook is to develop learning through both teaching useful strategies at the individual and group level. 'Metro' is a book that was published by Oxford University Press (2017). This textbook is prepared for intermediate, level 2, students. Its aim is to prompt students' interest in the English language through providing them with the right balance of support and rigor (Styring, n.d.). This teaches them to become confident and independent learners. Those textbooks include a variety of activities and assignments that can assist students to enhance their intellectual talents and help to implement the TRIZ method while teaching students how to solve problems.

3.3. Research Setting

3.3.1. Context

This study was conducted in an Iraqi school, Dar Alselam, that was founded in 2015 in Gaziantep-Turkey. Dar Alselam is an international school which includes three different levels; these levels are primary, intermediate, and secondary level.

The English language is a subject that is taught to all students at all levels of primary, intermediate, and secondary school. Students, in the intermediate level, attend school every weekday except Saturday and Sunday. According to the school's timetable, students learn English every day during official working hours, for 40 minutes at a time (see appendix VIII). Arabic and Turkish are two other languages that taught at Dar Alselam school. Most subjects are taught in Arabic language except English and Turkish lessons. Consequently, students only communicate in English during the English class.

3.3.2. Participants

Eighth grade students, age 13 to 15, at an international, Iraqi school in Gaziantep-Turkey, were the participants in this study. Eighth-grade students were the subject of this study, according to an expert's opinion, that they have the enthusiasm and ability to learn new ideas and information. In addition, the eighth-grade students are not deemed to have a ministerial degree – students do not undergo exams where the outcomes will seriously impact their future educational journey - therefore, it was assumed that experimenting with lesson would have no real harmful impact. Twenty students, from one school, participated in this study. Ten female students were in the experimental group and ten male students were in the control group. According to Boyle (1987), who surveyed students of both genders in learning English, found that the test scores of girls' English proficiency were higher than boys. However, it was a possibility that applying the study to gender-segregated classes would not impact the result of the study because many gender variations in classroom performance patterns are related to pupils and teachers are mostly reacting to the many pressures that boys and girls bring (Good, 1973). The selection of the experimental and control groups was not in random. The decision to conduct the research at this school was based on

several considerations. Firstly, the school's principal provided a favorable research context, in that they allowed the researcher to attend classes to take in-person observations. Secondly, the school was located in the same city so the researcher could attend all English lessons in order to take notes.

3.4. Instruments

In this study, a mixed-method approach was used to collect both quantitative and qualitative data to measure the variables related to the use of TRIZ as an innovative teaching method. This approach is commonplace in education studies, and academics recognize it as a robust and reliable method. Quantitative data was obtained using the KET test (see Appendix II) to quantify the effects of applying TRIZ as an innovation method on learners' performance by comparing the post-test to the pre-test results in a reliable way. Qualitative data was obtained through observation to the researcher observing and making note of teacher-student interactions.

3.4.1. Key English Test (KET)

According to Fryzlewicz (2020), the KET test is designed for non-native English speakers at the A2 level (see Appendix III). This test is deemed by the Common European Framework of Reference for languages as reliable and suitable language test for the eighth-grade students (CEFR, n.d.). Reliability is importance because it ensures consistency and stability with a measuring instrument (Sürücü, 2020). To ensure that this KET test was in fact reliable – and convenient for students participating in this study - the researcher piloted it to ten students and found that it was. Ten students were selected because the alpha coefficient was 0.91, suggesting that the KET test has high internal consistency (Ary, 2010). The researcher used only the writing and the reading sections test as the standardized pre- and post-test as a measurement of the participants' English level. The KET consists of 32 questions split into seven sections, and it covers two skills: reading and writing. The participants had 60 minutes to complete all the questions. The test consisted of five reading sections and two writing sections. Detail about the sections follow:

- 1- The first section contained option multiple choices about real-life texts; for example, notices, messages, emails, signs, etc. The participants had to choose the best sentence to demonstrate the meaning of the text.
- 2- The second section contained multiple matching questions. Here, the participants had to answer seven questions and three short paragraphs regarding the same topic.
- 3- The third section contained multiple choices questions. It contained a longer text as well as five questions, and the participants had three options (A, B, or C) for each question.
- 4- The fourth section contained multiple-choices cloze; a reading and writing text has six gaps, and the participants had to choose the best word from three possibilities (A, B, or C) for each gap.
- 5- The fifth section contained open cloze questions. The participants had an email with six gaps, and they had to fill the gap with the most appropriate word for each gap by themselves.
- 6- The sixth section contained guided writing task. The participants had to write a short note with at least 25 words. In this task, the participants were given some information that they were to include in the note.
- 7- The seventh section contained a picture story task. The participants were given three pictures and were required to write a story about these pictures with at least 35 words.

3.4.2. Observations

Observation is a description of a particular situation, set of actions, and traces in a study context (Marshall, 1989). This method was used to observe and describe the participants' performance in the experimental class and the classroom interaction. In such a way, observations enabled the researcher to look for nonverbal expressions of feeling, discovered who interacts with whom and how participants connect, and also helped them to see the amount of time spent on different activities (Schmuck, 1997). The researcher played the observing-participant role in that the participants were unaware that they were under observation. The researcher engaged in the class and made observations. This method entailed collecting data using one's senses, by looking

and listening, in a methodological and meaningful way (McKechnie, 2008). The main purpose of using this tool was to monitor the participants in both classes and compare their similarities and differences on several points. These include the students' interaction with the teacher, the students' performance and engagement during the lessons, and the difference in using the TRIZ method and the tradition method during lessons (see Appendix V).

3.5. Data Collection Procedures

Before both providing the KET test to the participants and observing them in lessons, approval was sought from the university, the researcher's supervisor, school's principal (see Appendix VI), and participants' parents (see Appendix VII). The consent form included the main purpose and the techniques of this research. The students who took part in this study were assured that the inputs they provided would be confidential and would not be shared with anyone else beyond the readers of this research.

3.5.1. Data Collection

In order to conduct this study, written permission had to be obtained from Gaziantep Directorate of National Education. After this, the researcher contacted the school principal and the subject teacher to explain the research. In addition, in order for students to participate in the study, their parents' consent was required. The data collection process of this study began at the start of the first semester of the academic year 2021/2022. As the research method was quasi-experimental, the TRIZ principles – following a discussion with the research supervisor - was developed and applied to the eighth-grade students in the experimental group. In contrast, the control group were taught using the traditional teaching method, without getting any guidelines from TRIZ.

The research implementation went through several stages. Firstly, the researcher and teacher explained to the students why this research was conducted. Secondly, the TRIZ principles was introduced to students, and students of the experimental group were told that the TRIZ principles would be applied on their English curriculum. The research period lasted for two months, during which the students have a 40-minute English class every day of the week. The reading and

writing KET were taken by students in both the experimental and the control groups to obtain the pre-test data. During the test, the researcher acted as a supervisor to ensure students took the test correctly and reliably.

Nine of the forty TRIZ principles were used for this study. They are listed below, each followed by descriptions of how they were adapted in the experimental class:

1- **Preliminary Action Principle** means performing the required change -either fully or partially- to an object before it is required. This includes project pre-planning. This principle was used to help students develop their writing skills. The teacher explained how important brainstorming was before writing and how they can accomplish it.

2- **The Other Way Round Principle** is inverting the action(s) used to solve the problem or turning the object 'upside down'. For example, cooling an item instead of heat it. This principle was used to help students develop their reading skills, through the re-order the paragraph' activity.

3- **Another Dimension Principle** means using several methods to be conducted such as using a multi-story of objects instead of a single-story arrangement. Another way is to rotate or title the thing. For example, organizational hierarchy. This principle was used to help students develop their reading skills through jigsaw reading. In another words, each group member reads a different paragraph and then summarized for the group, and students match titles to the suitable paragraph.

4- **Periodic Action Principle** means using periodic or frequent actions instead of continuous actions. In the case actions are periodic, pauses were used between activities to conduct a different action. For example, getting an activity done between actions. This principle was used to help students develop their reading and writing skills through adding different student activities, related to different skills, during the class.

5- **Blessing in Disguise Principle** means using harmful factors in order to generate a positive result or combining a harmful action to another one to resolve the problem by eliminating the primary action. For example, introducing fear of competition to replace fear of change. This principle was used to develop students' writing skills. This method

based on writing a text with mistakes, and students have to correct mistakes by working in groups.

6- Feedback Principle means using feedback to enhance an activity or a process performance. If feedback is used, it is preferable to change its magnitude or impact. For example, relying on customer satisfaction instead of budget variance to measure the management. This principle was used to help students develop their writing skills through using peer feedback, correction, and content comments.

7- Self-service Principle means making an item serve itself by doing auxiliary useful actions. For example, through a self-help group. This principle was used to help students develop their writing skills. Students had to reflect and edit their own work. In other words, it refers to peer correction or feedback; first draft and second drafts.

8- Color Changes Principle suggests changing an object's color or its properties to improve its observability. An example of this is transparent communications. This principle was used to develop students' reading and writing skills. Students would be taught to use highlighters with different colors to identify important information, correct words or sentences.

9- Composite Structures Principle means using several structures instead of uniform. For example, through conducting training using many tools including lecture, simulations, video, etc. This principle was used to develop students' reading or writing skills through using different tools during the class. For example, through showing a short video about a topic before reading or writing task to get students attention and interest.

Each principle was introduced to students in the aim of giving them the same chance to understand TRIZ. Finally, after finishing the treatment period, KET was applied for both groups as post-test. For the pre-test, all participants in the experimental and control groups completed the KET test on the same day. The KET test is reliable and has relevance to many of the TRIZ principles. For example, students had to brainstorm in order to write short paragraph, and the test included pictures that got students' attention and interest. There were answers key for Cambridge's KET reading and writing sections (Cambridge University Press & Assessment, 2021) in

order to verify the participants' reading and writing skills (see Appendix IV). In the term of distribution marks of the reading and writing questions, the researcher played the role of assessor. The assessor assigned marks based on the KET scoring guideline (Exam English, 2021) for the following criteria: option multiple choices, option multiple matching, option multiple-choice cloze, open cloze, guided writing, and picture story. The key reading and writing paper were divided into seven sections with a total of 32 questions. In parts 1-5, the participants received one mark for each correct answer, whereas there was a maximum of 15 marks for each part 6-7. The total grade for the KET was 60.

3.5.2. Data Analysis

A mixed-method research design was used in this study. Quantitative and qualitative data were collected from the eighth-grade students. The researcher used a mixed-method research design since both qualitative and quantitative data results could be compared and validated, which ensured any conclusions reached are robust and valid (Byrne, 2007). Overall, employing a mixed methods design aided a deeper understanding. The quantitative data was obtained through taking a pre-test and post-test for the students while the qualitative data was obtained through taking observations.

IBM (SPSS 22) Statistical Package for the Social Science was used to analyze the quantitative data and to estimate the reliability of the study's result. SPSS is a software platform which includes advanced statistical analysis, text analysis, open-source extensibility, big data integration, and application deployment (Gardiner, 2021). The KET test scores of both groups were inputted into SPSS and a pair of measurements - a t-test and independent sample t-test- were used to analyze difference in English level. These tests indicate if there are any statistically significant differences in the students' reading and writing skills across the two groups. The qualitative data were analyzed using the thematic analysis (TA); a technique used for detecting and analyzing meaning patterns in a dataset (Braun & Clarke, 2006). The researcher followed six steps according to the thematic analysis, to analyze the taken observations, as follows:

- 1- Familiarization means being well familiar with the entire data through reading and re-reading the transcripts.
- 2- Coding means to generate initial codes in order to organize data in a meaningful and systematic way. Coding helps in reducing lots of data into small chunks of meaning.
- 3- Generating themes means highlighting significant or interesting data or research questions in an organized pattern.
- 4- Reviewing themes entails evaluating, adjusting, and refining the preliminary themes that were discovered in step 3 to ensure that data are logical and support the themes in addition to gather all the relevant data to the appropriate theme.
- 5- Defining and naming themes means determining the essence of each theme's content including what is the message of the theme? how do subthemes connect and relate to the primary theme? and what is the relationship between the themes?
- 6- And writing up means having a set of fully developed ideas that involve the final analysis and write-up of the report. This step aims to persuade the reader to understand the complex tale of the collected data by giving brief, cohesive, logical, and non-repetitive information within and between the themes.

3.5.3. Validity & Reliability

Validity and reliability are intently related; if a measurement is valid, it should also be reliable. Validity is a measure of how well an instrument fulfills its purpose by determining if it measures the behavior or quality that is designed to measure (Anastasi, 1997). Validity is therefore reliant on a meaningful and suitable interpretation of the data produced from the measuring instrument used in the analysis. Additionally, the measurement is considered reliable if the same result can be regularly achieved using the same procedures under the same conditions (Scribbr, 2016). According to Middleton (2016), to decrease the influence of external factors and to obtain valid generalizable results, keep the circumstances as consistent as feasible. Therefore, the researcher made efforts to ensure both groups meet specific criteria (apart from the use of the TRIZ technique). As such, all participants were within the same age range; taught by the same teacher; tested using the KET test under the same conditions and taught using the same curriculum regardless of their group.

CHAPTER IV

FINDINGS

4.1. Presentation

This chapter presents the obtained statistical data from the participants' pre- and post-test that was analyzed using SPSS. In addition, the observational data were analyzed using the thematic analysis method. The study's findings based on the research questions were presented in the first chapter of this thesis.

4.2. Normality Test

To determine if a data set is well-modeled by a normal distribution a normality tests was used.

Table 1. *Test of Normality*

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	.21	20	.01	.90	20	.06
Posttest	.17	20	.09	.91	20	.08

The Shapiro-Wilk Normality Test of the pre-test and post-test data indicates that Sig is greater than 0.05, indicating that the null hypothesis is accepted, indicating that the data from both pre and post-tests are normality distributed.

4.3. Experimental Group's Pre-and Post-Test Results

The pre-and post-test results of the experimental group were statistically analyzed using paired sample t-test to determine if there any significant difference between the KET pre-and post-tests.

Table 2. *Paired Samples Statistics of the Experimental Group*

	Mean	N	Std. Deviation	Std. Error Mean
Pretest	41.30	10	6.12	1.93
Posttest	51.50	10	6.02	1.90

Table 2 indicates a 24.7% increase in the mean over the period, from 41.30 (SD = 6.12) pre-test to 51.50 (SD = 6.02) post-test. As a result, it demonstrates a significant improvement in the learners' reading and writing achievements in the post-test. A paired samples t-test analysis of the mean differences of both tests was used to determine whether this improvement was statistically significant.

Table 3. *Significance Test for Experimental Group's Test Scores*

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Lower	Upper			
Pretest - Posttest	-10.20	2.61	0.82	-12.07	-8.32	-12.32	9	0.00

Table 3 evidences a t-test value of -12.32 (9), and a level of statistical significance of $p = 0.00$. The mean increase in the test scores was 10.20 with a 95% confidence interval ranging from -12.07 to -8.32.

4.4. Control Group's Pre- and Post-Test Results

A paired sample t-test was conducted to evaluate the significance of the learners' test scores.

Table 4. *Paired Samples Statistics of the Experimental Group*

	Mean	N	Std. Deviation	Std. Error Mean
Pretest	36.00	10	4.24	1.34
Posttest	43.00	10	4.78	1.51

Table 4 demonstrates a 19.4% increase in the scores over the period, from 36.0 (SD = 4.24) pre-test to 43.0 (SD = 4.78) post-test. This highlights that the achievement of the control group also improved without receiving any TRIZ treatment. Additionally, the mean differences of both tests were analyzed using a paired samples t-test to see if the improvement was statistically significant.

Table 5. *Significance Test for Control Group's Test Scores*

	Paired Differences							
					95% Confidence			
					Interval of the			
	Mean	Std. Deviation	Std. Error	Mean	Lower	Upper	t	Sig. (2-tailed)
Pretest – Posttest	-7.00-	3.16	1.00	-9.26-	-4.73-	-7.00-	9	0.00

Table 5 evidences a t-test value of -7.00 (9), and a level of statistical significance of $p = 0.00$. The mean increase in the test scores was 7.00 with a 95% confidence interval ranging from -9.26 to -4.73.

In conclusion, the result of this paired samples t-test showed the difference between the pre-and post-tests to be statistically significant. However, the effect size of the control group is smaller, with a mean difference of -7 compared to -10 with the experimental group. This shows that the TRIZ method had a bigger effect on difference in pre-and post-test scores.

4.5. The Learners T-Test for Two Independent Samples

In this section, an independent sample was conducted to compare the mean scores for the experimental and the control groups' academic achievements to see if the difference was statistically significant.

Table 6. *Independent Samples Test for the Learners*

group		N	Mean	Std. Deviation	Std. Error Mean
General	Experimental	10	10.20	2.61	0.82
difference	Control	10	7.00	3.16	1.00

Table 6 highlights that the experimental group ($M = 10.20$, $SD=2.61$) was 3.20 points higher than the control group ($M = 7$, $SD = 3.16$).

Table 7 evidences that there were statistically significance differences in the t-test value of $17.39 = 2.46$ and a level of statistical significance of $p = 0.02$ in the scores which is lower than 0.05.

Table 7. Independent Samples Test for the Learners

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Differ ence	Std. Error Differ ence	95% Confidence Interval of the Difference	
General difference	Equal variances assumed	0.05	0.82	2.46	18	0.02	3.20	1.29	0.47	5.92
	Equal variances not assumed			2.46	17.39	0.02	3.20	1.29	0.46	5.93

Thus, the magnitude of the difference in the means (3.20, with a 95% confidence interval of 0.46 to 5.93) was significant. Hence, the experimental group was supported using TRIZ methods during teaching.

4.6. Reading Skills

4.6.1. Reading Skill Pre-and Post-Test Results for the Experimental Group

The reading skill pre-and post-test results for the experimental group's learners analyzed using a paired sample t-test, similar to the analysis in section 4.2. and 4.3.

Table 8. Paired Samples Statistics of Reading Test for the Experimental Group

	Mean	N	Std. Deviation	Std. Error Mean
Pre-test reading	22.40	10	2.54	0.80
Post-test reading	26.90	10	2.13	0.67

In table 8, the findings of the analysis showed a 20.1% in the marks of the learners reading skill from 22.40 (SD = 2.54) pre-test to 26.90 (SD = 2.13) post-test.

Table 9. *Significance Reading Test for Experimental Group's Test Scores*

	Paired Differences				95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	Mean	Lower	Upper			
Pre-test	-4.50-	1.35	0.42	-5.46-	-3.53-	-10.51-	9	0.00	
Post-test									

Table 9 shows a t-test value of = -10.51 and a level of statistical significance of $p = 0.00$. The mean increase in the test scores was -4.50 with a 95% confidence interval ranging from -5.46 to -3.53.

4.6.2. Reading Skill Pre-and Post-Test Results for the Control Group

As previously stated, the KET test scores of both the experimental and control groups were compared. The learners' performance in the control group has a worse performance than those in the experimental group. However, the scores between the pre-and post-test for the control group were statistically significant.

Table 10. *Paired Samples Statistics of Reading Test for the Control Group*

	Mean	N	Std. Deviation	Std. Error Mean
Reading Pre-test	21.70	10	1.15	0.36
Reading Post-test	25.30	10	2.05	0.65

Table 10 evidences that the reading scores for the control group increased. Indeed, the control group reading scores improved by 16.6% from 21.70 (SD = 1.15) pre-test to 25.30 (SD = 2.05) post-test.

Table 11. *Significance Reading Test for Control Group's Test Scores*

	Paired Differences				95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	Mean	Lower	Upper			
Pre- and Post-test	-3.60-	1.57	0.49	-4.72-	-2.47-	-7.21-	9	0.00	

In addition, table 11 shows that these values are statistically significant, with a T value of 9 and a = -7.21 and a level of statistical significance of $p = 0.00$. The mean increase in the test scores was 3.60 with a 95% confidence interval ranging from -4.72 to -2.47.

4.6.3. Significance Reading Test for the Experimental and the Control Group's Score

The results of the reading test for both groups compared using a paired sample t-test in order to specify the difference between both groups.

Table 12. Paired Samples Test of Reading Test for Both Groups

group		Mean	N	Std. Deviation	Std. Error Mean
Experimental	Reading Pre-test	22.40	10	2.54	0.80
	Reading Post-test	26.90	10	2.13	0.67
Control	Reading Pre-test	21.70	10	1.15	0.36
	Reading Post-test	25.30	10	2.05	0.65

Table 12 shows the mean scores of the pre-and post-tests for the experimental and the control groups. The findings highlight an improvement of 4.5 points, or 20.1%, for the reading skills of the experimental group, from 22.4 (SD = 2.54) to 26.9 (SD = 2.13). compares to 3.6 points, or 16.6% increase in the mean scores for the control group, from 21.70 (SD = 1.15) to 25.30 (SD = 2.05). Accordingly, the experimental group's reading skills improved 3.5 percent points more than the control group. This shows the effectiveness of using TRIZ method for reading skills.

Table 13. Significance Reading Test Scores of Both Groups

		Paired Differences						
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	Sig. (2-tailed)
group					Lower	Upper		
Experimental	Reading Pre- and post-test	-4.50	1.35	0.42	-5.46	-3.53	-10.51	0.00
Control	Reading Pre- and post-test	-3.60	1.57	0.49	-4.72	-2.47	-7.21	0.00

Table 13 evidences that the experimental group t-test value of -10.51 and a level of statistical significance of 0.00, and the control group t-test value of -7.21 and a level of statistical significance of 0.00. The mean of the experimental group was -4.50 with a 95% confidence interval ranging from -5.46 to -3.53. In contrast, the mean of the control group was 3.60 with a 95% confidence interval ranging from -4.72 to -2.47.

Overall, one can conclude that the experimental group's learners, using TRIZ as an innovative method, had statistically significantly improved their reading skills more than the control group.

4.7. Writing Skills

4.7.1. Writing Skill Pre-and Post-Test Results for the Experimental Group

A paired sample t-test was used to determine if the improvement in the learners' performance was statistically significant or not.

Table 14. *Paired Samples Statistics of Writing Test for the Experimental Group*

	Mean	N	Std. Deviation	Std. Error Mean
Writing Pre-test	18.90	10	3.75	1.18
Writing Post-test	24.60	10	3.94	1.24

Table 14 indicates that the mean of the pre-test was 18.90 (SD = 3.75) to post-test 24.60 (SD = 3.94).

Table 15. *Significance Writing Test for Experimental Group's Test Scores*

Paired Differences						Sig.	
						(2-tailed	
						t	
						df	
						)	
	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df
				Lower	Upper		
Pre- and Post-test	-5.70-	1.88	0.59	-7.05-	-4.34-	-9.54-	9 0.00

Table 15 shows a t-test value of = -9.54 and a level of statistical significance of $p = 0.00$. The mean increase in the test scores was 5.70 with a 95% confidence interval ranging from -7.05 to -4.34. Thus, the learners have improved their scores in the writing skill after the intervention.

4.7.2. Writing Skill Pre-and Post-Test Results for the Control Group

The below analysis evidences the clear difference between the writing scores of the pre-test and the post-test, with the mean of the post-test 17.70 being higher.

Table 16. *Paired Samples Statistics of Writing Test for the Control Group*

	Mean	N	Std. Deviation	Std. Error Mean
Writing Pre-test	14.30	10	3.52	1.11
Writing Post-test	17.70	10	3.16	1.00

Table 16 shows that the mean scores of the writing pre-test was 14.30 (SD = 3.52), whilst the post-test mean was 17.70 (SD = 3.16).

Table 17. *Significance Writing Test for the Control Group's Test Scores*

Paired Differences								
95% Confidence						t	df	Sig. (2-tailed)
Std. Error			Interval of the					
Mean	Std. Deviation	Mean	Lower	Upper				
Pre- and Post-test	-3.40-	1.83	0.58	-4.71-	-2.08-	-5.85-	9	0.00

Table 17 shows that a t-test value of -5.85 and a level of statistical significance of $p = 0.00$. The mean increase in the test scores was -3.40 with a 95% confidence interval ranging from -4.71 to -2.85.

4.7.3. Significance Writing Test for the Experimental and the Control Group's Score

To analyze the difference in scores between the experimental and control groups, the results of the writing test for both groups compared using a paired sample t-test.

Table 18. *Paired Samples Test of Writing Test for Both Groups*

group		Mean	N	Std. Deviation	Std. Error Mean
Experimental	Writing Pre-test	18.90	10	3.75	1.18
	Writing Post-test	24.60	10	3.94	1.24
Control	Writing Pre-test	14.30	10	3.52	1.11
	Writing Post-test	17.70	10	3.16	1.00

Table 18 shows the mean scores of the pre-and post-test for both groups. The findings show a mean pre-test score of the experimental group as 18.90 (SD = 3.75) and a mean post-test score of 24.60 (SD = 3.94). In contrast, a mean pre-test score of the control group as 14.30 (SD = 3.52) and a mean post-test score of 17.70 (SD = 3.16).

Table 19. *Significance Writing Test Scores of Both Groups*

		Paired Differences							Sig. (2- taile d)
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		T	df	
Experimental	Writing Pre-and post-test	-5.70	1.88	0.59	-7.05	-4.34	-9.54	9	0.00
Control	Writing Pre-and post-test	-3.40	1.83	0.58	-4.71	-2.08	-5.85	9	.000

Table 19 shows the t-test performed on both the control and experimental groups were statistically significant ($p = 0.00$), however the experimental group had a higher t-value at -9.54 than the control group at 5.85. The experimental group mean was of -5.70, with a 95 percent confidence interval of -7.05 to -4.34. The mean of the control group, on the other hand, was 3.40, with a 95 percent confidence interval of -4.71 to -2.08.

The experimental group's writing post-and pre-test differed by 5.70, whereas the control group's post-and pre-test differed by 3.40. As a result, there were 2.30 difference in achievement between the experimental and control groups.

4.8. The Experimental and Control Groups' Learners Interaction

As interaction helps in language acquisition and social skills development, maximizing interaction in the classroom is an important element of the teacher's job (British Council, 2021). Therefore, the impact of this was measured in this experiment using observations tool. As previously noted, the researcher monitored the impact of different teaching styles and interaction in order to compare their similarities and differences in several ways.

Although the teacher used the same curriculum to educate the experimental and control groups' students, they used the TRIZ method in the former group only. TRIZ method lends itself to using a learner-centered participatory approach. Therefore, the teacher in the experimental group acted as a facilitator of the learning process in the classroom by stating the lesson objectives; presenting the lesson's concept; and using TRIZ method while teaching. On the other hand, for the control group, the teacher acted as the central, authoritative character in the classroom. In

addition to this method, the teacher used a variety of instructional strategies, including role-playing and debate, for both groups. The only difference was that, for the experimental group only, the teacher described what TRIZ are and what the research's goal was.

There was difference in interaction between the experimental and control groups' students. The use of the TRIZ method encouraged students to use teamwork in the experimental classroom. Although they initially were opposed to this – with one student stating, "We used to work individually" - they eventually accepted this and other methods in TRIZ. Accordingly, they transformed their individualistic learning techniques into more collaborative methods, allowing them to learn more quickly and effectively.

4.9. TRIZ Method and the Development of the Reading and Writing Skills

The TRIZ Method was employed in order to improve the experimental group's reading and writing skills. The TRIZ principles, in addition to the methods chosen by the teacher, were employed to improve writing and reading skills. After two months of the intervention, the researcher noted that the experimental group's learners' reading skills were improved.

With regards to the experimental groups' reading skills, the learners seemed to have a very limited amount of vocabulary, so they had problems in understanding the meaning of the whole text and participating in the lesson. For example, the researcher noted that the learners paused at every word they did not understand and inquired about its meaning. Later, the teacher taught the learners, in the experimental group, the method of breaking down a paragraph into smaller chunks; a method called 'Another Dimension Principle' (Altshuller, 2013). The teacher divided the class into groups to work in pairs-or teams, with each group member reading a different paragraph and then summarizing it for the group and then to the rest of the class. In addition, using the highlighter to indicate the key words in a paragraph helped the learners to improve their skimming and scanning techniques, which led them to assume the meaning of the unfamiliar vocabulary based on the context. Some students complained about the length of phrases or a paragraph, but they were able to overcome this problem by adopting the principle 'Other Way Round' (Altshuller, 2013). This

involved, breaking a sentence or paragraph down into smaller parts and then re-reading it.

For writing skills, the learners suffered from various problems, including an inability to form new ideas about a topic, a lack of imagination, and a lack of interest in writing. The teacher used the TRIZ principles to help students overcome some of these problems, such as through the Preliminary Action and Composite Structures principles (Altshuller, 2013). The learners were taught how to brainstorm about the topic before beginning writing, including through use of short videos or pictures. This method helped the learners to improve their vocabulary and ideas for writing and kept them motivated. The teacher also used the TRIZ principle 'Periodic Action' to enhance students writing skills at the beginning by reading a short text and then asking them to write something similar to what they had read. This method also effectively helped the teacher to keep the learners' focus throughout the lesson.

The learners not only improved their reading and writing skills, but they also learnt to both learn effectively and independently and also give feedback to others. Furthermore, they learnt how to work together cooperatively and help one another. This was facilitated by the teachers' use of the TRIZ principles and their innovative ways of delivering a lesson. In terms of development, both the learners in classroom progress and their test grades improved. As such, one learner commented that "we found out how to study by ourselves and what is the meaning of working together". Overall, it was clear that use of the TRIZ method improved the experimental group skills when compared to the lack of its use in the control group.

CHAPTER V

DISCUSSION

5.1. Presentation

The purpose of this chapter is to discuss the study's findings in relation to relevant literature. All the findings presented are derived solely on the participants' reading and writing tests and the researcher's observations of TRIZ implementation.

5.2. TRIZ as Innovative Method Effect on Teaching the English Language

In order to investigate if the TRIZ Method is a useful tool for English teaching, the TRIZ method was used on eighth-grade students in two classes. The first class represented the experimental group who were exposed to TRIZ method, whereas the second class was the control group, who were not exposed. The KET pre-and post-tests for reading and writing skills were used to compare the learners' results in the experimental and control groups. In addition, the researcher played the role of an observer to keep track of the learners in both groups and compare and contrast their similarities and differences on a variety of points.

The KET pre-and post-test findings for both groups to some extent showed agreement on the research hypothesis that the innovative method of TRIZ method is more useful for teaching English more than traditional methods. The general KET test results of the experimental and control groups were compared, the comparison evidence that the difference between the post-test and pre-test for the experimental group is ten points, whereas the difference between the post-test and pre-test for the control group was seven points. Thus, the difference in scores on the tests between the two groups is only three points in comparison. These findings indicate that the experimental group's learners, which used TRIZ as an innovative method, improved their performance more than the control group. Therefore, using the TRIZ method to teach the English language may help them enhance their performance.

5.3. TRIZ Impact on the Learners' Writing and Reading Skills

The KET test measured only reading and writing skills, with each skill being crucial for learners and complementary to the other. A separate analysis was carried out to compare both groups performance for each skill. Between the experimental and control groups there was a one-point difference in accomplishment for reading skills and three points for writing skills. The data evidenced that the experimental group's writing skills were better than their reading skills. However, Habibi (2015) noted that reading and writing skills are related to each other, in that developing one skill will automatically improve the other. In addition to the test score data, the observations made throughout the experiment matched the KET test results. Indeed, there were differences in the performance between the experimental and control groups' learners. TRIZ method complemented the communicative approach and participatory methods like task-based learning. The implemented activities based on the TRIZ principles encouraged students to communicate with each other and share their knowledge with each other. Students are encouraged to speak with one another and share their expertise through the TRIZ-based activities that were developed. All the skills that the experimental groups gained encouraged them to have more control over the learning process, and they were taught how to solve problems, think critically, and apply what they had learnt.

5.4. Research Findings against Literature Review

Throughout the literature review, it was found that the use of TRIZ in English language was relatively novel although it has previously been used in other field such as engineering. Nevertheless, all the tools and principles of TRIZ were designed to provide innovative solutions to technological problems and could be applied to various subjects. Learning and teaching of foreign languages historically has a wide range of approaches; English language teaching methodology has previously incorporated strategies that are comparable to the TRIZ principles. However, English is a social science, and for the first time, the TRIZ method as an innovative method was used to solve problems in English. Although the TRIZ method for English education is novel by name, the content of the applied principles is similar to previously implemented social science activities and tasks. For example, the principle 'Another Dimension' is

similar to jigsaw reading, and the principle 'Color Change' is similar to using a highlighter. However, combining them into a single methodology with a well-structured lesson plan has never been used as a stand-alone language education approach. Using the TRIZ method for teaching may motivate learners and encourage them to participate in the class activities and tasks (Taajamaa, et al., 2013). Integrating creative methods, according to Sanrach (2019), helps learners better understand the class content and increases their learning skills. Indeed, after implementing the TRIZ method in this study and according to the KET test results and observations, using the TRIZ helps in supporting the learners' performance. In addition, learners commented, "We learned how to study alone and what it means to collaborate". TRIZ method has been successfully used in developing problem-solving skills (Belski, 2007) and in improving learners' performance in mathematics (Ashour, 2015). This study demonstrates its potential to improve outcomes in English language education as well.

Overall, the outcomes of this study revealed that students in the experimental group outscored those in the control group in both writing and reading performance, and the results were statistically significant. This study's findings were valuable in many ways. For example, it makes the case for the use of TRIZ principles in English language teaching, despite the fact that it is a social (not technical) language. The findings shows that the learners' performance of the experimental group was improved. In the past, teachers used innovative teaching methods for a variety of reasons, including advancing scientific research, enhancing students' innovativeness, and strengthening their independent thinking, it is critical to increase their spirit of invention and creativity. The current study adds to the reasons for the use of TRIZ in many ways.

Although this paper promotes the use of TRIZ in English teaching a number of limitations must be noted. Firstly, considering this study was implemented for just ten students in the experimental group, it is worth mentioning that some classes contain more than twenty students such as at state schools, so there should be further research to investigate if TRIZ as an innovative method is useful with a larger number of students. Secondly, the use of TRIZ as an innovative method should be tested with high school students in a different setting. Thirdly, there was a statistically significant

difference in the performance of both the experimental and control group students. This indicates that the teaching methods utilized are effective, but they should be supplemented with more innovative techniques. Furthermore, the statistically significant differences between the experimental and control groups in this study show that employing the communication approach and participatory learning, both of which are consistent with TRIZ method, help learners perform better. Therefore, the TRIZ activities that were used as innovative techniques were a success.

In conclusion, many factors should be considered before applying TRIZ in English language teaching. Firstly, the intervention duration should be extended, as this study's intervention period was only two months. As a result, the TRIZ method should be integrated into a lesson plan throughout the school year. Secondly, teachers should be trained so that they can learn more about the TRIZ method while also educating students. The findings of this study are consistent with other studies that have utilized TRIZ to provide and improve educational systems; this study focused on the usage of the TRIZ method with foreign language learners.

CHAPTER VI

CONCLUSION AND RECOMMENDATIONS

6.1. Presentation

This chapter presents the summary and conclusion derived from this study, whereby TRIZ was used as an innovative method in English language teaching to improve learners' reading and writing skills. It also provides practical suggestions that English teachers may be able to implement TRIZ in their classrooms beyond this study.

6.2. Summary of the Study

The findings of this study were summarized according to the three statements of the problems stated in the first chapter. Firstly, it considered to what extent applying TRIZ as an innovative method can increase learners' writing and reading skills. Secondly, it analyzed how useful TRIZ was for teaching the English language. Thirdly, it evaluated if learners who utilized TRIZ as an innovative method performed better on a standardized reading and writing test when compared to those who do not use it. The study was conducted using the quasi-experimental design. Therefore, two classes participated in this study; the first class represented the experimental group who had the treatment, while the second class represented the control group who did not have any intervention. A mixed method approach was used to collect both quantitative and qualitative data, which were KET English Test and observations tool. The aim of using this method was because the outcomes of both qualitative and quantitative data gave a deeper understanding. Additionally, the results can be compared at the same time and used to validate and construct a strong foundation (Byrne, 2007). In Gaziantep-Turkey, twenty students of the eighth grade, age 13 to 15 years old, were targeted in this research. Using SPSS to analyze the collected data, it was found that TRIZ as an innovative method is useful for teaching the English language. As previously stated, learners who had the opportunity to receive lessons using the TRIZ methods performed better in reading and writing skills when compared to the scores of control groups. The

results also indicate that the participants improved their performance in the writing section more than in the reading section.

6.3. Conclusion

The current research sheds light on the impact of TRIZ implementation as an innovative method for foreign language teaching and learning in terms of improving learners' writing and reading skills.

In the light of this study's findings, teachers should be encouraged to use a variety of teaching methods to fulfill the needs of their students, and they should be flexible in their application of diverse methodologies and approaches in the classroom. Because this study relies on a communicative strategy and participatory learning, it was obvious that at the beginning, students preferred to work alone rather than in pairs or groups. This demonstrates the strong need for teachers to encourage students to work in groups more because it helps them to learn from one another and enhance their communication skills. In this study, an existing textbook was utilized throughout the lesson for both groups, however, questions and topics within the book were explained via innovative, TRIZ method for only the experimental group. Though the results suggest that control group student who only used the textbook also improved their reading and writing skills, they did not improve their end results as much as those who were treated with the application of TRIZ. TRIZ implications for teaching and learning suggest that teachers can constantly adapt and reformulate their teaching materials in order to lead the learners to higher achievements.

6.4. Suggestions for Further Studies & Implications

The findings of the current study reveal that, the learners' performance in the experimental group was improved not only in the terms of test scores but also in the terms of their ability to communicate with one another. It is suggested that further research should be conducted with learners in primary and secondary schools, with the goal of investigating whether the use of TRIZ in language teaching and learning at all levels of schools is effective. In this way, teachers can assist students in improving their communication skills as well as their test scores. Furthermore, while employing

TRIZ as an innovative method for teaching EFL learners, all English skills - including speaking and listening - should be considered for future studies.

Additional studies with students from other schools, for example states schools, and in other contexts should be conducted to examine if using TRIZ as an innovative method always has any impact on students' performance. Also, further research should be focused on completing the syllabus according to TRIZ method at the scheduled time. The content of TRIZ principles is comparable to other teaching approaches; therefore, comparing TRIZ method to other English language teaching methods and instructions as an innovative method will be valuable.



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APPENDICES

Appendix I: TRIZ Principles

In this appendix, a brief description of each which were quoted from several research, for example Maan and Domb (1999), Maan and Cathain (2001) and Marsh (2004) for each of the 40 inventive principles to help readers better understand how to apply them to create solutions:

Principle 1. Segmentation means dividing an object into independent components to make an object easier to disassemble and enhance the segmentation degree. For example, segmenting the computer into parts as a set of handles.

Principle 2. Taking out means separating an object's part which is inconvenient or doesn't offer value in order to place it in the best possible operating conditions for the whole system. For example, the removal of an air conditioning system's 'noisy' compressor to the outside.

Principle 3. Local quality that can be applied depending on three ways; firstly, make each component of an object function in the best conditions for its operation. Secondly, make each component of an object serve a different and valuable purpose. Finally, each component of an object should be placed in the best possible operating conditions. For example, lunch box has special compartments for hot and cold solid items as well as for liquid.

Principle 4. Asymmetry means to use asymmetrical forms instead of symmetrical forms or increase the degree of asymmetry of an object that is already asymmetrical. For example, more fair two-way conversation between management and employees.

Principle 5. Merging means bringing identical or similar objects closer together to perform parallel operations or bringing parallelize actions together in time. For example, personal computers in a network.

Principle 6. Universality means making an element or structure performs multiple functions without the use of additional elements. For example, the team leader serves as a timekeeper and recorder.

Principle 7. Nested Doll means incased a single item within another, then that item will be incased in a third and so forth. For example, Matrioshka doll.

Principle 8. Anti-Weight means compensating for an item's weight by combining it with another item that has a lifting force. For example, using helium balloon to support advertising signs.

Principle 9. Preliminary Anti-Action means creating early stresses in an item that will oppose known undesirable working stresses afterward. For example, pre-stressed bolts.

Principle 10. Preliminary Action means performing the required change - either fully or partially- to an object before it is required. For example, project pre-planning.

Principle 11. Beforehand Cushioning means preparing emergency means ahead of time to compensate for an object's low reliability. For example, back-up parachute.

Principle 12. Equi-potentiality means limiting position change in a potential field. For example, modify the operating conditions in order to eliminate the need to raise or lower objects in a gravity field.

Principle 13. The Other Way Round means inverting the action(s) used to solve the problem or turning the object 'upside down'. For example, cooling an item instead of heat it.

Principle 14. Spheroidality – Curvature means moving from flat to spherical surfaces, from pieces in the shape of cube to constructions in the shape of a ball. For example, use arches and domes for strength.

Principle 15. Dynamics means to allow or design the characteristic of an item's, external environment or process to change in order to be optimal or to find an ideal operating situation. For example, empowerment.

Principle 16. Partial or Excessive Actions means if achieving 100% of an objective through using a specific solution approach is difficult; the problem may be significantly easier to be solved by utilizing 'slightly less' or 'slightly more' of the same

method. For example, communicate more frequently and with more detail than you believe is necessary.

Principle 17. Another Dimension which includes several ways to be conducted such as using a multi-story of objects instead of a single-story arrangement. Another way is to rotate or title the thing. For example, organizational hierarchy.

Principle 18. Mechanical Vibration which means utilizing oscillation. If there is oscillation, its frequency should be increased. For example, fearing from disturbance or imbalance could create creativity, and communication could be frequently increased through multiple modes including newsletter, internet, etc.

Principle 19. Periodic Action means using periodic or frequent actions instead of continuous actions. In the case actions are periodic, use pauses between activities to conduct a different action. For example, getting activity done between actions.

Principle 20. Continuity of Useful Action means keep working continuously, always making all parts of an item work at full capacity. Also, remove any actions that are unnecessary or uncommon. For example, conduct training during pauses in work.

Principle 21. Skipping means to conduct a process or a particular step of a process at a high rate. 'Incrementalism is innovation's worst enemy' Nicholas Negreonte, MIT Media Lab.

Principle 22. Blessing in Disguise means using harmful factors in order to generate a positive result or combining a harmful action to another one to resolve the problem by eliminating the primary action. For example, introduce fear of competition to replace fear of change.

Principle 23. Feedback means using feedback to enhance an activity or a process performance. If feedback is used, it is preferable to change its magnitude or impact. For example, relying on customer satisfaction instead of budget variance to measure the management.

Principle 24. Intermediary means to use an intermediary process or to mix a temporarily action – that can be removed easily- with another one. For example, hire consultant.

Principle 25. Self-service means making an item serve itself by doing auxiliary useful actions. For example, self-help group.

Principle 26. Copying means using simpler, optical or inexpensive copies if original item is unavailable or expensive. For example, virtual reality.

Principle 27. Cheap Short-Living Objects means substituting a costly item with several low-cost items. For example, using disposal paper object in order to avoid using the expensive durable objects.

Principle 28. Mechanics Substitution suggests replacing mechanical tools with sensory such as optical, acoustic, taste or smell. For example, mind-maps.

Principle 29. Pneumatics and Hydraulics means replacing solid parts with gas or liquid one such as air cushion.

Principle 30. Flexible Shells and Thin Films means using flexible items instead of three-dimensional structures. For example, using card transactions instead of money.

Principle 31. Porous Materials suggests adding porous factors to an object such as improve internal communication through creating internal network accessible by all layers.

Principle 32. Color Changes suggests changing an object's color or its properties to improve its observability. For example, transparent communications.

Principle 33. Homogeneity means make objects of the same materials interact with each other. For example, co-located project teams.

Principle 34. Discarding and Recovering means making an element is rejected or changed after it has served its purpose or has become useless. For example, load/capacity balance through using contact labor.

Principle 35. Parameter Changes which can be applied through changing one of four elements of an object including physical state, concentration, flexibility degree or temperature. For example, six thinking hats.

Principle 36. Phase Transitions means using phenomena occurred during the phase transition such as storing energy as ice.

Principle 37. Thermal Expansion means using materials thermal expansion or contraction. For example, personality matching on work-teams.

Principle 38. Strong Oxidants means to replace common air with oxygen-enriched air or pure oxygen. For example, guest speakers at a seminar.

Principle 39. Inert Atmosphere means using an inert environment instead of normal one or adding neutral parts to an object. For example, inviting a neutral third party during difficult negotiations.

Principle 40. Composite Structures means using several structures instead of uniform. For example, conduct training using many tools including lecture, simulations, video, etc.

Appendix II: Cambridge's Key English Test

Questions 1 – 6

Part 1

For each question, choose the correct answer.

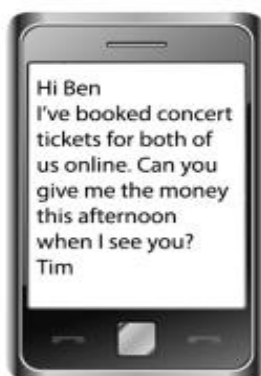
1

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



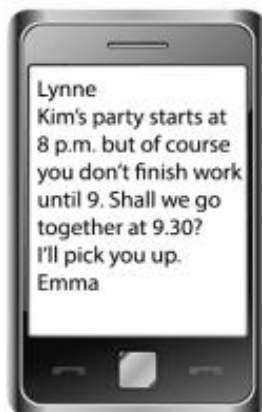
- A** Tim thinks Ben should look on the concert website.
- B** Tim hopes that Ben will be able to come with him.
- C** Tim wants to know if Ben can pay him back today.

3



- 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.

4



- 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.

5



- 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.

6



Why did Sophie write this message?

- 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.

Chrissie



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

Part 6**Question 31**

You want to go swimming on Saturday with your English friend, Toni.
Write an email to Toni.

In your email:

- ask Toni to go swimming with you on Saturday
- say where you want to go swimming
- say how you will travel there.

Write **25 words** or more.

Write the email/story on your answer sheet.

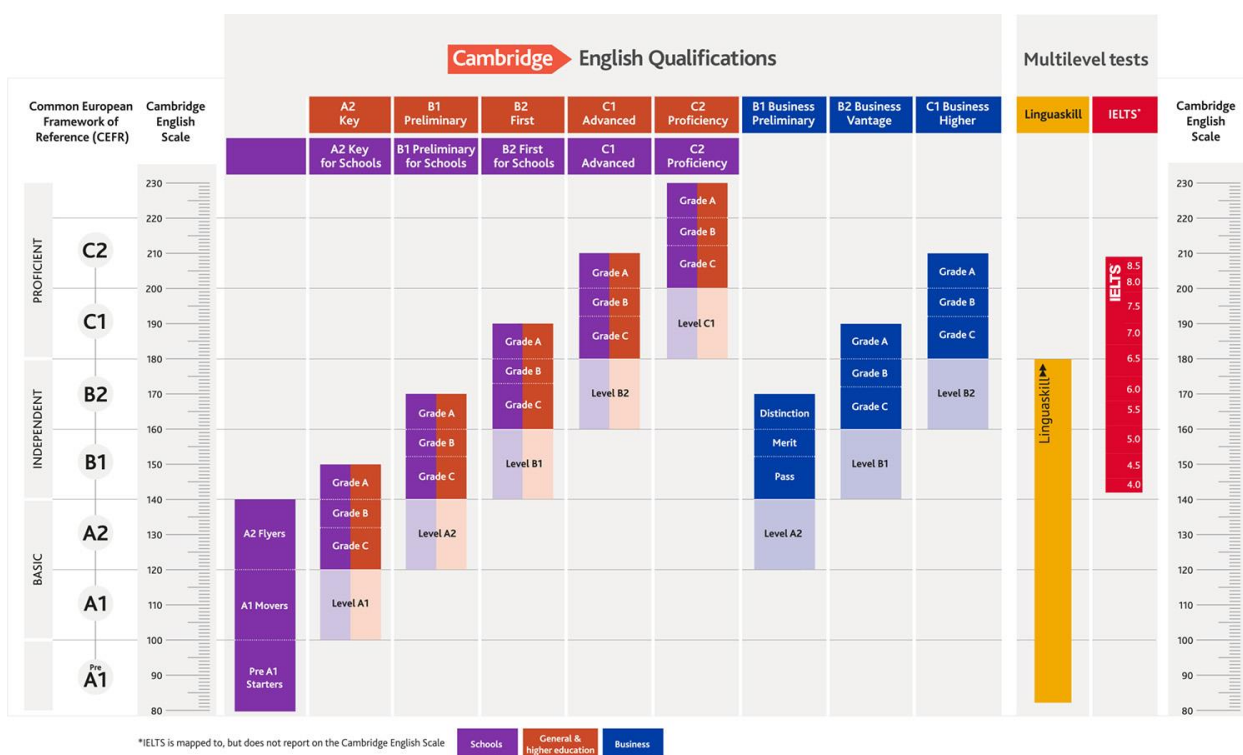
Part 7**Question 32**

Look at the three pictures.
Write the story shown in the pictures.
Write **35 words** or more.



Write the email/story on your answer sheet.

Appendix III: The Cambridge English Scale



Appendix IV: The KET Answer Key

EXAM	PAPER	SYLLABUS/COMPONENT	SESSION/DATE/VERSION NO.	MARK SCHEME VERSION
KEY	RW	D421/01	SAMPLE	V1

PART 1	KEY
1	B
2	C
3	B
4	A
5	B
6	C

Part 2	KEY
7	C
8	B
9	A
10	B
11	C
12	C
13	A

EXAM	PAPER	SYLLABUS/COMPONENT	SESSION/DATE/VERSION NO.	MARK SCHEME VERSION
KEY	RW	D421/01	SAMPLE	V1

Part 3	KEY
14	B
15	A
16	C
17	B
18	A

Part 4	KEY
19	B
20	B
21	A
22	B
23	C
24	C

Part 5	KEY
25	a / this
26	in / during
27	of
28	go
29	play / watch
30	when / after

Appendix V: Questions for Observation Report

Observation Report

Instructor: ----- Observer: -----

Grade: ----- Number of students present: -----

NOTE:

This form will be used by the observer to report the feedback from the classroom observation, it is focused on descriptions regarding agreed-upon items for observation based on the intervention period.

- 1- Describe the teaching methods of the instructor for both groups?
- 2- Which TRIZ methods are the instructor using? What difference are the methods making for learners for each of the writing and reading parts?
- 3- What is the difference between the experimental and control students' interaction with the instructor?
- 4- What overall impact do you think this lesson had on students and their learning outcomes?
- 5- Is there alignment of the TRIZ activities and assessments with learning outcomes?

Appendix VI: School's Permission

DIRECTORATE OF EDUCATION IN GAZIANTEP

Date: 25-09-2021

FROM: DAR ELSELAM School

To: DIRECTORATE OF EDUCATION IN GAZIANTEP

SUBJECT: TEACHING PERIOD IMPLEMENTATION

We inform you that Batoul Alkasem got permission from our side to conduct her study under the title "TRIZ as an Innovative Method in English Language Teaching to Increase Learners' Reading and Writing Skills" for two months at 'DAR ELSELAM School'.

Starting date: 1 October 2021

Finishing date: 1 December 2021

BEST REGARDS....

DAR ELSELAM SCHOOL PRINCIPAL



Appendix VII: Parents' Consent

Parents' Consent Form (Translated into English)

Dear Parents:

Do you allow your child to participate in a study to apply a new method of teaching in English Language Teaching? I am doing research to find out whether applying TRIZ, as a new method of teaching will increase the students' achievement.

This could be an opportunity for your child to be taught with a new method of teaching. I don't have any personal demands from your child, and they will participate as one of their interests.

I want to make sure that any private or personal information related to your child will be kept safe. You can call or contact me if you have any further questions about the research.

I hope you show your acceptance for your child to participate in this study.

Kind regards,

Name and Signature of the parents

Researcher: Batoul Alkasem

Master Student in English Language Teaching

Appendix VIII: Lessons Plan

Unit 1

Lesson 1

AB3

A school magazine

Al Mustafa Intermediate School for Girls has its own monthly magazine. A team of four students and an English teacher produces it. Students from different classes write for it. They put their contributions in a box and the team chooses the best.

Read the notice and answer the questions below.

Write for the school magazine.
Choose any of these sections:

• Puzzles	• Stories	• School news
• Town events	• Sports reports	• Poetry
• Cartoons	• Jokes	• Letters
• Problem page		
• Interviews (Talk to somebody famous in the town.)		

Post them here - NOW -
and get your name in print!



- 1 How many sections are there?
- 2 Write them in alphabetical order. 1 Cartoons
- 3 Match the sections to these definitions:
 - a) funny stories with small pictures
 - b) short, funny stories
 - c) writing with words that rhyme
 - d) asking people questions about themselves
 - e) things happening in the town
 - f) descriptions of events, for example, football matches
 - g) reports about school events
- 4 Which section do you think you would read first? Why?

Possessive 's'

Go and get the boy's bags. = one boy
BUT
Go and get the boys' bags. = more than one boy

The school's magazine is very interesting. = one school, one magazine
BUT
The schools' magazines are very interesting. = more than one school, more than one magazine

Unit 1

Lesson 3

AB4

An interview

👤👤 This is the students' first interview for their magazine. Read it and find words that mean the following:

- | | |
|-----------------------------|----------------------------|
| 1 famous | 3 the opposite of 'polite' |
| 2 the opposite of 'to like' | 4 a road round a town |



Meet a local personality

This month, we talked to Jack James. He runs Pizza Cabin, the well-known Italian takeaway and cafe in the High Street. I'm sure we've all been there many times with our families.

What kind of people do you like and dislike?

I really like people who are polite and ask for things nicely. I don't like people who are impolite and shout.

What's your favourite food?

Italian food, of course – pizzas and pasta. But I also like some English food, like fish and chips.

What's your favourite TV programme?

I watch all the programmes about cooking. My favourite one is *A Taste of the Sea*. I always learn something.

Do you have any suggestions for making the town better?

There are too many cars in the town centre. Why don't they build a ring road?

How long have you worked at Pizza Cabin, Mr James?

I've worked in the cafe for ten years, but I've lived in Ashby since I was born.

Do you enjoy your work?

I enjoy some parts of my work. I don't enjoy cleaning up when the cafe closes.

What do you like doing in your spare time?

I love painting.

What things do you dislike doing?

I don't like washing-up. I have to do that at work. And I hate gardening. It's very hard work. But we have a beautiful garden because my wife loves gardening.

Now answer the questions in your Activity Book.



Lesson Plan 1 – Experimental Class

[illegible]

Lesson Plan 1 – Control Class

Lesson Topic: A School Magazine	Lesson Duration: 40 minutes	
Materials: A white Board – A Book – model magazine		
Lesson objectives: By the end of the lesson, the student will be able to: Recognize the content of the school magazine and know the words related to the magazine. Read an episode of a story ===== Grammar: Possessive.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Show pictures of the different magazines and ask if students have seen something like that before. Then, ask students to share what they know about the content of the magazine. Tell students that today they will learn about magazines and learn vocabulary related to magazines.	5 min
Activities	1- Explain about the school magazine and its content through letting students answer questions to define the new words. • Display the pictures of magazines and ask students to tell you what parts are in? Then, ask students to read the words in the box and answer the questions below. 2- Write on the boards (boy's bag – boys' bag) to show the difference between singular & plural possessive. 3- Read the story and answer questions quickly. • Ask students to create a school magazine.	15 min 10 min 10 min

Unit 1

Lesson 4

AB2
2
  Listen to the interview. Then read it aloud.
1 *for and since*

I've lived in Ashby **since** I was born.
I've worked in the cafe **for** ten years.

2 *like + verb with -ing*

I like **cooking**. I don't like **cleaning** up.

3 *Using adjectives to describe*

I like **helpful** people. I don't like **noisy** people.

4 *Using relative clauses to describe*

I like people **who help others**. I dislike people **who are noisy**.

 Ask and answer these questions.

1

How long have you
been in this school?

How long has your family
lived in Basra?

How long have you been in this class?

How long have you been ill?

 Now ask and answer questions like the ones in the interview. You can use the words and phrases in the boxes. You can also use your own words.

2

What do you like doing?

What don't you like doing?

enjoy love hate playing football watching films

3

What kind of people do you like?

What kind of people don't you like?

kind happy friendly unfriendly funny lazy quiet sad

4

What kind of people do you like?

What kind of people don't you like?

can tell jokes can play chess can do puzzles tell lies don't say anything



Lesson 5 AB5-6

Unit 1

Lesson 6

AB6/7

Problems

Look at a magazine problem page.

Who has a problem? What is it? Explain it.

Now read the page and answer the questions in your Activity Book.

*Aunt Sally answers your problems*

Dear Aunt Sally,

I am very, very shy. I have just arrived in a new school and I am afraid to speak to the other students. I cannot make new friends. When the teacher asks me a question in class, I go red. I stammer and can't say the answer even when I know it. The other students laugh at me. Can you help me?

Jill (aged 15)

Dear Jill,

A lot of people are shy, but you can learn to be confident. Don't hurry. It takes time. Here are some tips to help you.

- 1 Before you go to school, say to yourself, 'I will speak to somebody today.'
- 2 Be friendly. Say 'hello' to the other girls and smile.
- 3 To stop stammering, try this. Before you try to speak, count to five and think again about what you want to say.
- 4 Talk to your teacher. Ask her to give you a little time to answer.

Good luck!

Aunt Sally

What do you think of each piece of advice Aunt Sally gave Jill?
Is it ... very good? ... good? ... not very good?

Lesson Plan 2 – Experimental Class

Lesson Topic: A School Magazine		Lesson Duration: 40 minutes
Materials: A white Board – A Book – Handout - Pictures		
Lesson objectives: By the end of the lesson, the student will be able to: understand the difference between since and for. Recognize how to use adjectives and relative clauses to describe. Solve problems through writing a paragraph.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Make a revision of the previous lesson (a school magazine – interview) by inviting students in pairs to put sentences to the right questions. Tell students that today they will learn the difference between 'for' and 'since', how to describe using adjectives and relative clauses, and how to solve a problem following many steps.	5 min
Activities	1- Understand the difference between for and since • Use diagrams on the board to explain that the word for is used when referencing a period such as “three years” while since is used when referencing a specific point in the past such as “fourth grade”. • Then, let's students complete some sentences on the board (using S. book 7) as a class.	10 min
	2- Describe using adjectives and relative clauses • Show some pictures to students and ask them to describe what they see. To teach children how to describe things or people, write some sentences on the board that uses adjectives and relative clauses. • Put students in groups and ask them to describe figures in the handout. Then, one student from each group will summarize what they wrote to the other students, and students will give each other criticism to help them improve. (Feedback principle – Another dimension principle).	12 min
	3- Write about a problem and solve it. • Two students read the problem and its solution from the book. (Using preliminary action principle) doing brainstorming, ask students to suggest a possible problem. Then, put students into groups and ask them to write the solution.	13 min

Lesson Plan 2 – Control Class

[illegible]

Unit 1

Lesson 7

AB8/9



Embarrassing moments

Look at the pictures on page 11 and try to guess the stories.

Now read the sentences and work out the correct order. The Reading tip will help you. Write the letters in your copybook.

Reading tip 1 – pronouns and *there*

The main pronouns are:

she he it we they them

Pronouns like *she*, *he*, *it*, *we*, *they*, *them* and the word *there* are very useful words. We can use them instead of repeating nouns.

Examples:

My *father* went to the *shop* on the corner. *He* bought a magazine *there*.

The *cat* ran up the *tree*. *It* got stuck *there*.

The *boys* played in the *park*. *They* loved it *there*.

So sentences with pronouns and *there* come after sentences with nouns.

AB8A/B

Listen and check your answers.

Work It out!

To *die* means to stop living.

Example: *Zaid was very sad when his grandfather died.*

One of the girls wrote in her story: *I nearly died!* What do you think it means?

You know what *black* means and you know what *eye* means.

But what is a *black eye* and how do you get one?

AB9 C/D

WYC Application Form

Name: Bob Walker Age: 15
 Address: 23 Middle Street, Ashby, England
 How often do you go camping? I go camping in my summer holidays.
 Why do you like camping? I really enjoy sitting round a campfire in the evening talking and singing. I also like cooking and eating outside.
 Which other countries have you been to? I have been to France, Germany and the USA.
 Which languages do you speak? I speak English and French.
 What do you do in your spare time? I listen to a lot of music and I enjoy cooking.
My favourite hobby is skating. I want to win a competition one day.
 Why do you want to come to the WYC? I would like to come to the WYC because I want to see Australia. I want to see all the strange animals that live there. I have seen a lot of TV programmes about them.
 Which of these things would you like to do at the WYC?



scuba diving



climbing



ballooning



windsurfing



horse-riding

I would like to go ballooning.

I nearly died!

The first sentence and the last sentence in the stories are in the correct place. Just for fun, we have put the other sentences in the wrong order. Can you work out the stories?

- One day last week, my mum and I were out shopping in town.
- 'That's nice,' she said. 'Your uncle will like that. He drinks lots of tea.'
- It was the shop assistant's own mug!
- I picked it up to look at the price and spilt hot coffee all over my dress.
- Mum saw a really nice mug on the shelf.
- We were looking for a present for my uncle, so we went to a gift shop.
- I was so embarrassed that I nearly died!

Liz Ellen - Year 8



Lesson Plan 3 – Experimental Class

Lesson Topic: Embarrassing moments		Lesson Duration: 40 minutes
Materials: Pictures – flashcards – worksheet – book – board		
Lesson objectives: By the end of the lesson, the student will be able to: Understand why and how to use 'pronouns and there'. Read a short story. Fill in an application form.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Divide the students into groups and assign each group a letter. Then, students have to find out two adjectives and relative clauses with that starting letter to describe themselves. After 3 minutes, a spokesperson of each group will introduce themselves in front of the class.	6 min
Activities	1- Understand why and how to use 'pronouns and there'. • Show flashcards to students to explain the kinds of main pronouns. • Read the reading tip 1 – pronouns and there. • Use different colors (color change principle) to refer to the main pronoun and there.	10 min
	2- Read a short story • Look at the picture then try to guess the story. • Put students into pairs and ask them to work out to order the sentences correctly to have a short story (the other way round principle). • Finally correct the work through providing feedback by students to each other (Feedback principle).	12 min
	3- Fill in an application form. • Ask students questions about camping 'like vs do not like'. • Distribute a reading sheet to students about the campaign then ask them to fill out the form. (Periodic action principle).	12 min

Lesson Plan 3 – Control Class

Lesson Topic: Embarrassing moments		Lesson Duration: 40 minutes
Materials: Pictures – flashcards – worksheet – book – board		
Lesson objectives: By the end of the lesson, the student will be able to: Understand why and how to use 'pronouns and there'. Read a short story. Fill in an application form.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Divide the students into groups and assign each group a letter. Then, students have to find out two adjectives and relative clauses with that starting letter to describe themselves. After 3 minutes, a spokesperson of each group will introduce themselves in front of the class.	5 min
Activities	1- Understand why and how to use 'pronouns and there'. • Show flashcards to students to explain the kinds of main pronouns. • Read the reading tip 1 – pronouns and there.	13 min
	2- Read a short story • Look at the picture then try to guess the story. • Ask students to work out order the sentences correctly to have a short story.	12 min
	3- Fill in an application form. • Ask students questions about camping 'like vs do not like'. • Fill out the application form.	10 min

Bob and Basim



Unit 1

Lesson 10

AB13
5

Read the story and find the answers to these questions.

- 1 Who is telling this story?
- 2 Where are the boys going?
- 3 How many unlucky things happen to Bob?

I was flying to Australia to the World Youth Camp. I met Basim when he got on at Baghdad. Now we were flying to Brisbane.

'I'm sorry,' I said.
'It doesn't matter,' said the flight attendant. 'I'll get you another one.' She tried to smile at me. There was orange juice everywhere – on the floor, on the seat and all over the flight attendant.

'Never mind,' said Basim. 'Accidents can happen to anyone.' 'But why do they always happen to me?' I asked.



A flight attendant



I was asleep when we landed. 'We're here,' said Basim. The man who looked at our passports was very friendly, but Basim could not understand him. He spoke a different kind of English.



passport

'I hope they don't all speak like that,' said Basim. 'Let's go and get our suitcases.'

About twenty minutes later, the first suitcases appeared.

'Here's mine,' shouted Basim. 'It's the first one!'

'And here's mine,' I said. 'The blue one. Can you get it, please, Basim?' He picked up the blue case.



Unit 1

Lesson 10

AB13



'Thank you,' said a grey-haired old lady behind us. 'Thank you so much. How kind of you.' She took the case and left.

'It looked like my case,' I said.

'Where *is* your case, then?' asked Basim. Now there were fewer and fewer cases going round.

'It's not here. It's lost. What shall I do?' I shouted. 'Why do these things always happen to me? Why me?' I was worried.

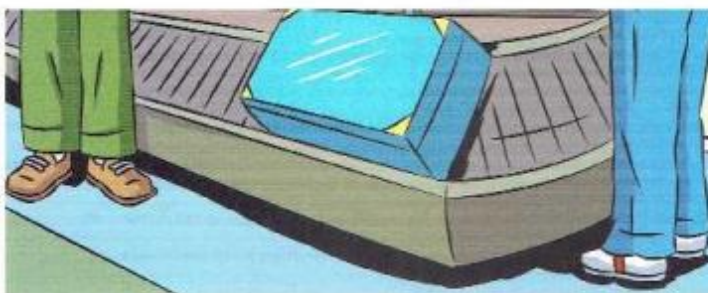
'Don't worry,' said Basim. 'Look, here it is. I knew it wasn't lost.'

We walked towards the customs desk.

'Do you have anything to declare?' asked the customs officer.

'No,' I said. 'We're going to the World Youth Camp.'

'That's nice,' said the customs officer. 'But would you mind opening your suitcase, please?' I opened my case and the customs officer looked inside. Then he looked at me. Basim looked at me. I looked at the case. 'Oh, no! It's the old lady's. Now what shall I do? Oh, why me? Why do these things always happen to me?'



Lesson Plan 4 – Experimental Class

Lesson Topic: Bob and Basim		Lesson Duration: 40 minutes
Materials: book – whiteboard – highlighter		
Lesson objectives: By the end of the lesson, the student will be able to: Comprehension reading Worked out the meaning of new words and idioms while they are reading. Know the definition of the following words 'passport – suitcase – flight attendant – customs officer'. Scanning: ask students to read the text and answer questions.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Break students into pairs and tell them that they have one minute to talk about themselves. They can choose what they want to discuss, such as something they like, where they live, their birthday, how old they are, their hobbies, and so on.	5 min
Activities	1- Comprehension reading Put students into groups and assign them the task of reading the story. After 5 minutes, have students choose a spokesperson to summarize what they've read to the rest of the class (another dimension principle).	13 min
	2- Worked out the meaning of new words and idioms Invite students to come up to the whiteboard and highlight unfamiliar words and idioms (color change principle). Then, ask other students to share their thinking about the meaning of these words. Finally, ask students to match the unfamiliar word to its correct definition (Another dimension principle).	12 min
	3- Answer questions Ask students to scan the text and let them answer the questions. Let students provide feedback to each other (feedback principle).	10 min

Lesson Plan 4 – Control Class

Lesson Topic: Bob and Basim		Lesson Duration: 40 minutes
Materials: book – whiteboard –		
Lesson objectives: By the end of the lesson, the student will be able to: Comprehension reading Worked out the meaning of new words and idioms while they are reading. Know the definition of the following words 'passport – suitcase – flight attendant – customs officer'. Scanning: ask students to read the text and answer questions.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Break students into pairs and tell them that they have one minute to talk about themselves. They can choose what they want to discuss, such as something they like, where they live, their birthday, how old they are, their hobbies, and so on.	5 min
Activities	1- comprehension reading Ask students to read the text for 5 minutes. Then, the teacher will ask them to answer comprehension questions to ensure their understanding.	13 min
	2- Worked out the meaning of new words and idioms Write the new words on the board with their definition. Then, read them many times and ask students to memorize the new words.	12 min
	3- Answer questions Ask students to scan the text and let them answer the questions.	10 min

Unit 2

Lesson 1

AB18-20

Keep fit!

Read this article. What is each paragraph about?

Take my advice ...

Fitness is very important. Unfit people cannot enjoy life. They get tired very quickly, so they cannot play games. They cannot run. In fact, they cannot even walk without getting tired and out of breath. So, if you want to enjoy life, you should get fit and keep fit.

How can you get fit? You should take exercise regularly. Games like football, basketball and

netball give you plenty of exercise because you have to run all the time. Swimming and cycling are also very good forms of exercise. If you don't like any of these, you can just go walking. You should walk quickly for about twenty minutes every day. Walking slowly will not make you fit and walking to your bedroom will not either! Some people think that taking exercise is

I'm fit.
Are you?



boring, but it doesn't have to be. If you take exercise with your friends, you will have fun.

Now answer the questions in your Activity Book.

AB18

Which of these boys do you think is fit?

1 Zaid They won't let me play. I get tired quickly.	2 Ahmed I watch TV all the time.	3 Salam I love running.	4 Yassir I love my car. I drive everywhere.
---	--	---------------------------------------	---

Give advice to the boys who are unfit.

You should ...

Giving advice with *should*

You need to get fit. You *should* take some exercise.
You're always tired. You *shouldn't* go to bed late.

AB19/20B-D

Unit 2

Lesson 2

AB20/21

Eat the right food

Talk about the foods and drinks in the pictures. Choose three things that are ... very good for you ... not so good for you.



Now read Layla Ahmed's report in the school magazine and check your ideas.

You are
what you
eat



A report of Nurse Fawzia's talk by Layla Ahmed

What did Nurse Fawzia mean? Before her talk, I did not understand, but I do now. This is what she said.

We all need food and drink, but what kind and how much do we need? Some kinds of food are very good for us, for example, fish, fruit and vegetables. They keep us healthy and they do not make us fat. We should eat five pieces of fruit and vegetable every day, but we can eat more. We should also drink a lot of water.

Meat and cheese are also good, but only if we don't eat too much. They have a lot of fat. We should be very careful about anything that has a lot of fat, salt or sugar in it. This does not mean that we should never eat biscuits, sweets, fries or crisps. It is all right to eat a few. If we eat too many, we will be unhealthy and we will get fat.

When Nurse Fawzia came to our school, I had a bag of crisps, two chocolate bars and a bottle of cola in my school bag. Today I have water and fruit in my bag.



too much too many a little a few

A **little** sugar is all right, but **too much** is bad for you.

A **few** biscuits are all right, but **too many** are bad for you.



Lesson Plan 5 – Experimental Class

Lesson Topic: Keep fit!		Lesson Duration: 40 minutes
Materials: whiteboard – book - cards		
Lesson objectives: By the end of the lesson, the student will be able to: Read and understand the article and answer the questions. Giving advice using 'should'. Recognize the kind of food and drinks.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students: 'what does 'fit' mean? Then, show students four cards that include pictures of four different people and ask them: 'which of these characters do you think is fit?' Tell students that today they will learn about fitness and the kind of food and drinks.	5 min
Activities	1- Read and understand the article and answer the questions. • Divide the article into two parts and then put students into groups and ask them to read the article. Each group will explain to the other what is each paragraph about? (Another dimension principle). • Let's students answer the comprehension questions from the activity book and then edit their answers according to the model answer under the teacher's supervision (self-service principle).	15 min
	2- Giving advice using 'should'. • Show a video to teach students how to give advice with should and should not (Composite structure principle) https://youtu.be/OxO7YB-INS0. • Ask students to read the report and highlight sentences that contain should. (color changed principle).	10 min
	3- Recognize the kind of food and drinks • Ask students to look at the picture on page 18 and write about the foods and drinks in the picture. Working in pairs, let's students choose the good food and drinks for health and the not good drinks and foods for health. • Draw a spider diagram with words in a box and ask students to match these words to the suitable choice (Activity book).	10 min

Lesson Plan 5 – Control Class

Lesson Topic: Keep fit!		Lesson Duration: 40 minutes
Materials: whiteboard – book - cards		
Lesson objectives: By the end of the lesson, the student will be able to: Read and understand the article and answer the questions. Giving advice using 'should'. Recognize the kind of food and drinks.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students: 'what does 'fit' mean? Then, show students four cards that include pictures of four different people and ask them: 'which of these characters do you think is fit?' Tell students that today they will learn about fitness and the kind of food and drinks.	5 min
Activities	1- Read and understand the article and answer the questions. Ask students to read the article silently. Then, let's students answer the comprehension questions from the activity book with the teacher.	15 min
	2- Giving advice using 'should'. - Read the sentences from the "students book" page 17 and explain to students why do we use should. - Ask students to read the report and check their ideas.	10 min
	3- Recognize the kind of food and drinks - Ask students to look at the picture on page 18 and write about the foods and drinks in the picture. Then, let's students choose the good food and drinks for health and the not good drinks and foods for health. - Draw a spider diagram with words in a box and ask students to match these words to the suitable choice (Activity book).	10 min

Unit 2

Lesson 3

AB22
7

In a restaurant

Look at the menu. Use the definitions to work out the meaning of these words:

fried grilled
baked lamb

Meat

Lamb curry
Beef curry
Fried chicken
Burgers
Hot dogs



Pizza



Fish

Fried fish
Grilled fish



Vegetables

Baked potato
Fries
Salad



Desserts

Apple cake
Chocolate cake
Ice-cream
Fruit salad



Drinks

Fruit juices
Milk shakes
Cola
Lemonade
Tea
Coffee
Mineral water

beef (n.) is the meat of a cow.

lamb (n.) is the meat of a sheep.

fried (adj.) means cooked in hot fat or oil.

grilled (adj.) means cooked under strong heat.

baked (adj.) means cooked in an oven.

Which things on the menu are ... good for you? ... not so good for you?



Waleed and Meena are in a restaurant with their father.

- 1 The waiter speaks first. Which of these things do you think he will say?
2 Who do you think will reply and what will he or she say?

1 What do you want?
Good evening.
Are you ready to order, sir?
Can I take your order, sir?

2 Good evening.
We're not ready.
No, sorry, we're not ready.
Yes, thank you.

Now listen and check your ideas. Then answer the questions in your Activity Book.



Lesson Plan 6 – Experimental Class

Lesson Topic: In a restaurant		Lesson Duration: 40 minutes
Materials: whiteboard – book – video – flashcards – words game		
Lesson objectives: By the end of the lesson, the student will be able to: To develop and practice: • vocabulary: foods & drinks • structure: ‘Do you like ...?’, ‘should’ • curricular work: menus, food groups, healthy eating Order a meal in a restaurant and discuss menu options.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Start the lesson by making a revision by: Divide students into two groups and ask them to talk about good food and not good food. Tell students that today they will learn how to order in the restaurant. How to talk about foods and drinks they like to eat.	5 min
Activities	1- Vocabulary of 'foods and drinks' • Show flashcards to introduce some food and drink items. Show each flashcard one by one and elicit the word. • Stick the flashcard on the board. Put students into two teams and let students on the first team call out sentences about foods they like and students on the second team give the others advice using 'you should'.	15 min
	2- Menus, food groups, healthy eating. Order a meal in a restaurant and discuss menu options. • Show a video to teach students how to order foods and drinks in a restaurant (Composite structure principle) https://www.linguahouse.com/esl-lesson-plans/general-english/at-the-restaurant/videoplayer/be-ex4mp4. • Read from the book p. 19 boxes 1 & 2. Then put students into pairs and ask one to order food and the other to take turns as a waiter.	12 min
	3- Writing a paragraph • Using the (preliminary action principle) make brainstorming before writing answering some questions such as: - What is your favorite place would you like to go to? - What is your favorite food and drink would you like to order? - Where is the restaurant you would like to visit?	8 min

Lesson Plan 6 – Control Class

Lesson Topic: In a restaurant		Lesson Duration: 40 minutes
Materials: whiteboard – book – flashcards – words game		
Lesson objectives: By the end of the lesson, the student will be able to: To develop and practice: • vocabulary: foods & drinks • structure: ‘Do you like ...?’, ‘should’ • curricular work: menus, food groups, healthy eating Order a meal in a restaurant and discuss menu options.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Start the lesson by making a revision by: Divide students into two groups and ask them to talk about good food and not good food. Tell students that today they will learn how to order in the restaurant. How to talk about foods and drinks they like to eat.	5 min
Activities	1- Vocabulary of 'foods and drinks' • Show flashcards to introduce some food and drink items. Show each flashcard one by one and elicit the word. • Stick the flashcard on the board. Put students into two teams and let students on the first team call out sentences about foods they like and students on the second team give the others advice using 'you should'.	12 min
	2- Menus, food groups, healthy eating. Order a meal in a restaurant and discuss menu options. • Read from the book p. 19 boxes 1 & 2. Then put students into pairs and ask one to order food and the other to take turns as a waiter.	12 min
	3- Writing a paragraph • Ask students to write a paragraph about their visit to a restaurant.	11 min

Unit 2

Lesson 4

AB22

8/9

Aches and pains

 Listen and look at the pictures.


Now match these sentences to the pictures.

- I have a stomachache.
- I've got a headache.
- I've got a toothache.
- I have an earache.



We say: *I've got a headache.*
OR *My head aches.*

They mean the same.

 Listen and read.  Then read the conversations aloud.

- | | |
|--|--|
| ○ What's the matter, Ansam? | ○ Are you all right, Jameel? |
| ● I've got a toothache. | ● No, my ear hurts. |
| ○ Oh, dear! You should go to the dentist. | ○ Oh, I'm sorry. You should go to the doctor. |
| ● Yes, I will. | ● I've been to the doctor. He gave me some drops. I have to put them in twice a day. |
| ○ What's wrong, Anas? | ○ You don't look well, Noora. |
| ● I have a stomachache and I feel sick. | ● I've got a bad headache. |
| ○ You shouldn't eat so many crisps in the break. | ○ Oh, dear. Here, take these two pills with some water. |
| ● Yes, I think you're right. | ● Thanks very much. |

What do you think of the advice the boys and girls give their friends?

 Now make up your own conversations.


Lesson 5 AB23-24

Unit 2

Lesson 4

AB24-27

Jalal's story

Jalal wrote this story for the school magazine. Read it quickly and answer the question at the end.

A true story *by Jalal Abdullah*

I sometimes have to look after my little brother for an hour or so when my parents go out. Ibrahim is ten. He always wants me to play with him, but I want him to play by himself. One day when I was playing a computer game, he said again and again, 'Jalal, I feel sick. I've got a pain in my stomach.'

'You always say that, Ibrahim.'

'There's nothing wrong with you,' I said angrily. 'You haven't got a pain. You are a pain. Sit down and watch that video.'

Ibrahim started crying and an hour later he was still crying loudly. I gave him a bag of crisps, but he didn't stop and he didn't eat the crisps. That was very unusual. I was shouting at him when my parents came home. They were very angry with me. I was very surprised when my father called an ambulance.

'Something is wrong,' my mother said. 'Can't you see? Ibrahim is in pain.'

A few hours later, the doctors took out Ibrahim's appendix. They saved his life.

I was very frightened. Ibrahim nearly died and it was my fault. I learned a lesson that day.



Which of these lessons do you think Jalal learned?

- 1 You should always believe your brother.
- 2 You should always listen to your brother.
- 3 You should always play with your brother.



You know the meaning of *pain*, but what do you think Jalal means when he says: 'You are a pain'?



Lesson Plan 7 – Experimental Class

Lesson Topic: Aches and Pain		Lesson Duration: 40 minutes
Materials: whiteboard – book - pictures – worksheet		
Lesson objectives: By the end of the lesson, the student will: Learn and practice language for describing and asking about pain. Give advice using should-should not. Practice reading quickly 'scanning' and answering comprehension questions. Practice writing		
Stage	Procedure	Time
Warm-Up & Objective discussion	Write up the words "pain, hurt, ache", then call out sentences using each one. Ask students to guess the meaning of these words. If they do not know their meaning, elicit the meaning of these words. Tell students that today they will learn how to describe and ask about pain and read a short story.	5 min
Activities	1- Learn vocabulary about aches and pain • Show pictures to students and ask them to guess the meaning. Put out these pictures on the board and write sentences to describe them. Ask students to match the sentences to the suitable picture (Another dimension principle).	10 min
	2- Give advice using should-should not. • Read the conversation on page 20 and they have to use a highlighter to highlight sentences that include 'should or should not' (color change principle). • Put students into two groups and give them a few minutes to think of sentences to give advice. Then ask for feedback in class and discuss where appropriate (to correct) – using the feedback principle.	10 min
	3- Reading a story • Provide students with a worksheet of a story from the student book P. 21; the story will be incorrect in its order. Ask students to re-order the story by working in groups (the other way round principle). Finally, let's students answer the questions.	10 min
	4- Practice reading • Provide students with a worksheet of a paragraph that is not correct and ask them to rewrite the paragraph without mistakes (Blessing in disguise principle).	5 min

Lesson Plan 7 – Control Class

Lesson Topic: Aches and Pain		Lesson Duration: 40 minutes
Materials: whiteboard – book - pictures		
Lesson objectives: By the end of the lesson, the student will: Learn and practice language for describing and asking about pain. Give advice using should-should not. Practice reading quickly 'scanning' and answering comprehension questions.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Write up the words "pain, hurt, ache", then call out sentences using each one. Ask students to guess the meaning of these words. If they do not know their meaning, elicit the meaning of these words. Tell students that today they will learn how to describe and ask about pain and read a short story.	5 min
Activities	1- Learn vocabulary about aches and pain Show pictures to students and ask them to guess the meaning. Put out these pictures on the board and write sentences to describe them. Then read the sentences that explain the picture and ask students to repeat them.	10 min
	2- Give advice using should-should not. - Read the conversation on page 20 and let students read the conversation individually. - Put students into two groups and give them a few minutes to think of sentences to give advice.	10 min
	3- Reading a story The teacher will read the story, then ask students to read the story. and answer the questions.	10 min
	4- Practice writing Ask students to write a story about themselves.	5 min

Unit 3

Lesson 1

AB36
15

The sports centre

 Listen and point to the pictures as you hear the names of the sports. Repeat the names.

ASHBY SPORTS CENTRE

Come to the sports centre and get fit!

You can choose from last year's old favourites:



And, from the beginning of this year, we can give you lessons in these sports:



Call us on 952841 for more information.



Verbs and sports

We **play** football, tennis, etc.We **go** swimming, horse-riding, etc.We **do** judo, karate, etc.

Can you work out the rules?

 Ask and answer.



What sports would you like to do?

I'd like to play volleyball.



I'd like to do gymnastics. And I'd like to go horse-riding.



AB36A/B

Unit 3

Lesson 2

AB36
16/17

The timetable

Dave phoned the sports centre and heard a message.

Listen to the message.

What does Dave have to leave?

Listen and repeat these words.

beginners advanced team practice

The sports centre sent Dave this leaflet.

Ask and answer questions about it.



When is the volleyball beginners' class?

On Monday from five o'clock to seven o'clock.

ASHBY SPORTS CENTRE		
Men's and boys' lessons: Tuesday, Thursday and Saturday Women's and girls' lessons: Monday, Wednesday and Friday		
Volleyball Beginners: Mon. 5 – 7 Team practice: Mon. 7 – 9	Tennis Beginners: Mon. and Tue. 7 – 9 Advanced: Fri. 5 – 7 and Sat. 3 – 5	Basketball Beginners: Tue. 5 – 7 Team practice: Sat. 3 – 5
Athletics Start now! Wed. and Thur. 5 – 7	Gymnastics Beginners: Tue. and Wed. 7 – 9 Advanced: Thur. and Fri. 7 – 9	Karate Learn a new sport! Mon. 5 – 7 Thur. 5 – 7
Swimming Team practice: Thur. 7 – 9 Fri. 7 – 9		Call 952841 to book a class and for information about other sports.

Ask and answer questions.
What sports do you want to do?

AB36



How good are you at volleyball?



I'm quite good at volleyball, but I want to practise.



I've never played volleyball. I'd like to learn how to play it.



The **man's** favourite sport is tennis. = one man BUT
The **men's** favourite sport is tennis. = more than one man

Make sentences with **women** and **children**.

Lesson Plan 8 – Experimental Class

Lesson Topic: The Sport Centre		Lesson Duration: 40 minutes
Materials: whiteboard – book - pictures – audio – cards		
Lesson objectives: By the end of the lesson, the student will: Talking about playing different sports using the correct verb. Recognize vocabulary that is related to sports: 'soccer – football – tennis – golf – basketball – baseball – volleyball – karate – athletics – gymnastics'. Students will define phrasal verbs related to a phone call.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students to share what kind of sport do they play and when they have played? Tell students that today they will learn vocabulary for sports.	5 min
Activities	1- Show pictures of different sports. • Ask learners what sport they are playing. • Put learners into two groups and ask them to write a list of all sports they can think of, (Preliminary action principle), then ask them to read their lists. • Use the 'sports' flashcard to introduce the suitable verb that could be used with a sport. Play – football - tennis Go – swimming – horse riding Do – judo – gymnastics – karate	15 min
	2- Define phrasal verbs related to a phone call. • Let students listen to two phone calls and a voice message. • Ask students to write down the informal and formal language, and highlight them using different colors of highlighter, related to telephone communication. (Color change principle). • The language is activated in a pair work speaking activity.	15 min
	3- Ask students to do exercise working in pairs and then they will correct their solving through provide feedback under the teacher's supervision (Feedback principle).	5 min

Lesson Plan 8 – Control Class

Lesson Topic: The Sport Centre		Lesson Duration: 40 minutes
Materials: whiteboard – book - pictures – audio – cards		
Lesson objectives: By the end of the lesson, the student will: Talking about playing different sports using the correct verb. Recognize vocabulary that is related to sports: 'soccer – football – tennis – golf – basketball – baseball – volleyball – karate – athletics – gymnastics'. Students will define phrasal verbs related to a phone call. Read and understand a story.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students to share what kind of sport do they play and when they have played? Tell students that today they will learn vocabulary for sports.	5 min
Activities	1- Show pictures of different sports. - Ask learners what sport they are playing. - Use the 'sports' flashcard to introduce the suitable verb that could be used with a sport. - Then, ask students to write down and repeat. Play – football - tennis Go – swimming – horse riding Do – judo – gymnastics – karate	15 min
	2- Define phrasal verbs related to a phone call. Let students listen to two phone calls and a voice message that include both the informal and formal language, related to telephone communication.	10 min
	3- Ask students to do the exercises and then they will correct the solve through working with the teacher on board.	15 min

Unit 2

Lesson 10

ARJ1
13

Bob and Basim – the eggs



Do you remember?

- | | |
|--------------------------|------------------------------------|
| 1 Who are Bob and Basim? | 2 Where did they meet? |
| 3 Where are they now? | 4 What happened to Bob on the way? |

Now read the next part of the story and find the answers to these questions.

- | | |
|--|-----------------------------------|
| 1 What do Bob and Basim have to do on the first morning? | 2 How do you make scrambled eggs? |
| 3 What happens to the eggs? | |

'Hello,' we said. There were four other boys in our tent – Paul from France, Chuck from America, Hans from Germany and Aziz from Algeria. I told them about my suitcase. They were all very kind and gave me everything that I needed.

On our first morning in the camp, we woke up early. I put on French trousers, an Iraqi shirt and an Algerian sweater. The trousers were too big and the sweater was too small.

'Never mind,' said Basim, laughing. 'Your suitcase will be here soon.'

'I hope so,' I said.

We had to cook breakfast for the whole camp. Hans and Aziz had to make the fire and Paul had to make the tea. Chuck had to do the washing-up. 'Basim and Bob, you're the cooks,' said Rod Border. 'Scrambled eggs for fifty, please.'

'What are scrambled eggs?' asked Basim.



Unit 2

Lesson 10

AB31

Q13



'Read this. Page twenty-three,' said Rod. He gave Basim a book – *Camp Cooking*. 'Don't burn them,' said Rod and went away.

'Leave it to me,' said Basim. I put butter into a pan. Basim broke seventy-five eggs into the pan and then I added milk, salt and pepper. Basim began to cook the scrambled eggs – slowly. He didn't burn them. They were delicious. Perfect.

All the other boys were sitting in the dining-tent, waiting for breakfast.

'Give me the pan,' said Hans. 'I'll carry it over to the table.'

'No, no,' I said. 'I'll do it.' I was proud of Basim's eggs. I picked up the pan and started walking.

Then it happened.

'Bob! Look out!' shouted Basim. 'A wallaby!'

'A what-a-be?' I asked. I did not hear the answer.

A small wallaby raced through our kitchen. It hopped over the fire and knocked over the tea. Then it knocked me over. Basim's perfect eggs flew into the air. The pan landed on a table. The eggs landed on the boys. I landed in a bush.

'I didn't know eggs could fly,' said one boy.

'Delicious,' said another, wiping some scrambled egg from his face.

'You missed the plates,' said a third boy.

Everybody laughed. They weren't angry.

'Are you all right?' asked Basim.

'Yes, thanks,' I said from my bush. 'But why me? Why do these things always happen to me?'

AB31

Lesson Plan 9 – Experimental Class

Lesson Topic: Bob and Basim – the eggs		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio		
Lesson objectives: By the end of the lesson, the student will: Read and understand a story Answer comprehension questions		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will ask questions about the previous part of the story to let students remember the previous details. Ask students to guess what will happen.	5 min
Activities	1- Ask students about Bob and Basim to make them remember the story before starting the next part.	5 min
	2- Put students into two groups and ask them to read the story and then choose a spokesperson from the group for other students. (Another dimension principle)	10 min
	3- Ask students to answer the questions and provide each other feedback when it is appropriate. (Feedback principle).	10 min
	4- Instruct learners "working in two groups" to write a summary of Bob and Basim's narrative. A spokesperson will then read what they wrote to the entire class. (Periodic action principle).	10 min

Lesson Plan 9 – Control Class

Lesson Topic: Have Fun with Words		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio		
Lesson objectives: By the end of the lesson, the student will: Read and understand a story		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will ask questions about the previous part of the story to let students remember the previous details. Ask students to guess what will happen.	5 min
Activities	1- The teacher will read the story and make revisions to the previous story in order for students to recall the entire story.	10 min
	2- Ask students about Bob and Basim to ensure that they engaged in the lesson and understand.	5 min
	3- Ask students to read the story silently.	10 min
	4- Ask students to answer the questions.	10 min

Unit 3

Lesson 6

AB41

Changes

Samir does judo. The editor of Samir's school magazine asked him to write a paragraph about it.

Study how Samir planned his paragraph.

First he made some notes.

- one day, do judo for my country
- no friends, now have lots
- didn't like competitions, now love them
- was shy, now confident
- was weak, unfit, now strong
- schoolwork was bad, now good at it

Then he put his notes in order and added some words.

Doing judo has changed my personality and my life. Examples:

- 1 personality - was shy, now confident
- 2 good for health - was weak & unfit, now strong, fitter
- 3 good for schoolwork - was bad, now good at it
- 4 no friends, now have lots
- 5 like competitions, hate losing
- 6 one day do judo for my country

Read Samir's article.

What did he write that was not in his notes?

I used to be shy

by Samir Salih, Year 8

I started doing judo two years ago and it has changed my personality and my life. I used to be very shy, but judo has given me confidence. Judo has also been good for my health. I used to be very unhealthy and unfit. I could not run very fast and I was often ill. Now I am much stronger and fitter. I also

used to be lazy, but now I train every day and I enjoy it. My teachers say that my schoolwork is better now. I used to be bad at it, but now I get good marks all the time. Before I started doing judo, I used to have no friends. I don't know why. Now I have lots. I also used to be afraid of competitions and exams. Now I really enjoy competing against other people and I hate losing. One day I hope to do judo for Iraq.

Find words that mean the following:

- 1 what kind of person you are
- 2 the opposite of 'shyness'
- 3 practise



Talking about changes

I **used to be** shy, but now I'm confident.

I **used to have** no friends, but now I have lots.

Talk about things you used to do, but don't do any more.



AB41A/B

Lesson 7 AB42

Lesson Plan 10 – Experimental Class

Lesson Topic: Changes		Lesson Duration: 40 minutes
Materials: whiteboard – book - brainstorming - worksheet		
Lesson objectives: By the end of the lesson, the student will: Discuss changes that learners would like to see in the world and write a paragraph about them. Recognize the past tense and learn how to use "used to". Write sentences using "used to".		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will tell the learners a short story about one change that happened to him. Then he will ask some of them to tell their stories.	5 min
Activities	1- Discuss changes that learners would like to see in the world and write a paragraph about them. - Ask students to write down three things that they love about the world (could be personal), and then three things that they would like to change. Give them a few minutes to note down some ideas. (Preliminary action principle). - Then put students into pairs to compare what they have written. Ask them to explain why they have chosen these things and get some feedback from their friends. (Feedback Principle) - Read the planned paragraph from the book then ask students to write about changes that happened to them individually after implementing those activities.	10 min
	2- Recognize the past tense and learn how to use "used to". - The teacher will explain why we use "used to" and how to use it. - Ask students to read Samir's article and they will highlight (color change principle) all sentences that include "used to". Then they will answer the questions below. - Ask students to write three sentences that include "used to" in order to practice.	12 min
	3- Students will be asked to write a paragraph about one change that happened to them. Then they will edit and correct the paragraph according to a model paragraph under teacher's supervision (self-service principle).	13 min

Lesson Plan 10 – Control Class

Lesson Topic: Changes		Lesson Duration: 40 minutes
Materials: whiteboard – book - worksheet		
Lesson objectives: By the end of the lesson, the student will: Discuss changes that learners would like to see in the world and write a paragraph about them. Recognize the past tense and learn how to use "used to". Write sentences using "used to".		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will tell the learners a short story about one change that happened to him. Then he will ask some of them to tell their stories.	5 min
Activities	1- Discuss changes that learners would like to see in the world and write a paragraph about them. - Ask students to mention three things that they love about the world (could be personal), and then three things that they would like to change. - Read the planned paragraph from the book then ask students to write about changes that happened to them.	10 min
	2- Recognize the past tense and learn how to use "used to". - The teacher will explain why we use "used to" and how to use it. - Ask students to read Samir's article and they will answer the questions below. - Ask students to write three sentences that include "used to" in order to practice.	15 min
	3- Students will be asked to write a paragraph about one change that happened to them.	10 min

Unit 3

Lesson 8

AB43
22

Have fun with words!

You practised saying a tongue-twister last year. How fast can you say it now?

Listen first.

*She sells sea shells on the sea shore.
The shells she sells are sea shells, I'm sure.*

It is difficult to say – it twists your tongue – because most of the words begin with 'sh' or 's' sounds. That's what a tongue-twister is – a sentence or two where the words begin with one or two sounds.

Listen, then try saying another one.

Peter Piper pecked a pot of pickled pepper.



Tongue-twisters don't have very much meaning, but they are funny. They are easy to make. This is what you do:

- 1 First, choose a sound, for example, **b**. Make a list of all the nouns and names you can think of that start with **b**.
Examples: *Bodria, Bashir, brother, ball, bag, balloon, bakery, banana, bed, bicycle, bird, boat, book, boy, bread, bus*
- 2 Next, make a list of all the verbs you can think of that start with **b**.
Examples: *bought, brought, broke, brushed, began*
- 3 Then make a list of all the describing words (adjectives and adverbs) you can think of beginning with **b**.
Examples: *big, brown, bad, blue, black, beautiful, busy, badly*
- 4 Finally, try to make a sentence with five or six of the words. You will probably need to use some words that don't begin with **b**.
Examples: *the, a, an, and, he, she*

Which pair can make the longest tongue-twister with the sound 'b'?



Unit 3

Lesson 7

Writing tip 2 – topic sentences

When you write a paragraph describing or explaining something, the first sentence often tells you what the paragraph is about. This is called the **topic sentence**.

What is the topic sentence of the article on page 38 of the Student's Book?

Write a paragraph about one of these:

- 1 Write about why people should do sport.
- 2 Write about a sport you do or play and how it has changed you.

First, think of a topic sentence.

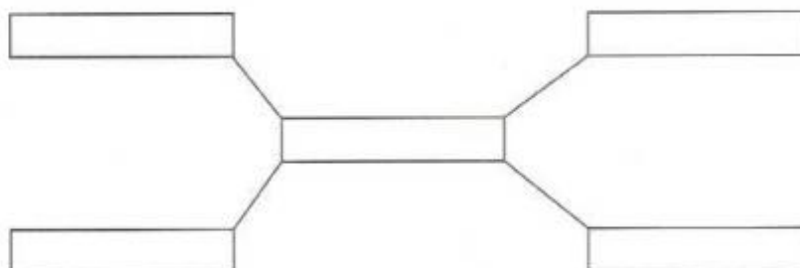
Example: 1 *I think that everybody should do athletics.*

or

2 *Doing athletics has changed me a lot.*

Then make notes about what you want to write.

- 1 Think of reasons for doing sport. Try to think of four.
- or
- 2 Think of the differences that sport has made to you. Try to think of four. Write your notes anywhere in this diagram.



Number your notes in the best order.

Lesson Plan 11 – Experimental Class

Lesson Topic: Have Fun with Words		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio		
Lesson objectives: By the end of the lesson, the student will: Practice pronunciation by playing a game to have fun while learning Teach learners how to write Tongue Twister Writing skills		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will pick a topic that has been covered in previous lessons and set a time limit of '60 seconds'. The teacher will ask some learners a question on that topic. The aim is to review what we have learned.	5 min
Activities	1- Practice pronunciation - The teacher will play audio to make students familiarize themselves with the sounds and the students will repeat it all together. (Composite structure principle). - The teacher will ask students to work in groups and explain the meaning of words. - Finally, students will pronounce the tongue twister together three times to give them a chance to right their mistakes.	10 min
	2- Teach learners how to write Tongue Twister Put students into two groups and ask each group to choose a consonant letter. Then, they have to make four columns: one for adjectives, one for nouns, one for verbs, and one for other parts of speech. (Preliminary action principle).	5 min
	3- Writing skills - Explaining what the topic sentence is and how to write it. - Put students into two groups and ask students to open their students' book P. 38 and highlight the topic sentence (color change principle). - Put students into pairs and ask them to write a paragraph about "why people should do sport". Then, let each partner make a correction to the other. (Feedback principle).	20 min

Lesson Plan 11 – Control Class

Lesson Topic: Have Fun with Words		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio		
Lesson objectives: By the end of the lesson, the student will: Practice pronunciation by playing a game to have fun while learning Teach learners how to write Tongue Twister Writing skills		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will pick a topic that has been covered in previous lessons and set a time limit of '60 seconds'. The teacher will ask some learners a question on that topic. The aim is to review what we have learned.	5 min
Activities	1- Practice pronunciation - The teacher will read the tongue twister from the book and ask students to repeat it after him. - Students will pronounce the tongue twister together three times to give them a chance to right their mistakes.	10 min
	2- Teach learners how to write Tongue Twister Ask students to make four columns: one for adjectives, one for nouns, one for verbs, and one for other parts of speech.	5 min
	3- Writing skills - Explaining what the topic sentence is and how to write it. - Ask students to open their students' book P. 38 and refer to the topic sentence. - Ask students to write a paragraph about "why people should do sport". Following instructions of the activity book.	20 min

Unit 3

Lesson 10

AB47
Q23*Bob and Basim – the ice-creams*

Read the story and find the answers to these questions.

- | | |
|--|---------------------------------|
| 1 Where was the tennis competition held? | 2 Why did Bob get an ice-cream? |
| 3 How many ice-creams did Bob buy? | |

On Wednesday afternoon, we had a surprise.

'Tomorrow, we're all going to Southport,' said Rod Border. 'There's a tennis competition. It's a big event. You'll see some of the best players in the world.'

'Who's playing?' Basim asked Rod.

Rod replied. 'Well, Heyton Blewitt and Khaleel Ibrahim will be there.'

At dinner that evening, everyone talked about the tennis competition. Basim was very excited.

'I used to watch a lot of tennis. It's my favourite sport,' I said.

'Game, fourth set, Plaster!' cried the referee.

The two players had been on the court for almost three hours. It was very hot, and they both looked exhausted. I felt exhausted, too.

'I'd like a break,' I thought.



Unit 3

Lesson 10

AB47

23



I decided to get an ice-cream to cool down.

'Will you get me one, too?'

Basim asked.

'And me!' said Paul.

'Me, too!' added Hans, from behind me.

'Looks like you have a few ice-creams to buy, Bob!' said Rod. 'Since you're going, I'll have one, too.' He handed me some money.

I sighed and walked away.

I had to queue for a long time to buy the ice-creams. I was worried. I didn't want to miss the match!

I paid the ice-cream seller and hurried back. I looked for Basim and

the others but I couldn't see them. The ice-creams were beginning to melt.

Then I saw Rod. He was standing up.

'Bob! Over here!' he shouted.

I climbed the steps towards him. Then, on the last step, I tripped. The ice-creams flew into the air. They landed on Rod.

Rod wiped the ice-cream off his face. He was smiling.

'Next time, I'd like to eat it, not wear it.'

Basim was laughing. So was everyone else.

'Why me?' I said. 'Why do these things always happen to me?'

Lesson Plan 12 – Experimental Class

Lesson Topic: Bob and Basim – the ice-creams		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio - pictures		
Lesson objectives: By the end of the lesson, the student will: Read and understand a story Answer comprehension questions Recognize words definitions		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will ask questions about the previous part of the story to let students remember the previous details. Ask students to guess what will happen.	5 min
Activities	1- Read and understand the story - Ask students about Bob and Basim to make them remember the story before starting the next part. - Put students into two groups and ask them to read the story and then choose a spokesperson from the group for other students. (Another dimension principle)	10 min
	2- Answer the questions - Ask students to answer the questions and provide each other feedback when it is appropriate. (Feedback principle). - Ask students to write a paragraph according to instructions on P. 47 "Activity Book".	15 min
	3- Recognize new words - Students will highlight new words in the story, using different colors, (color change principle), and write their definitions. - Ask students to match words to their suitable definitions, exercise B. from "Activity Book" P 47.	10 min

Lesson Plan 12 – Control Class

Lesson Topic: Bob and Basim – the ice-creams		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio - pictures		
Lesson objectives: By the end of the lesson, the student will: Read and understand a story Answer comprehension questions Recognize words definitions		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will ask questions about the previous part of the story to let students remember the previous details. Ask students to guess what will happen.	5 min
Activities	1- Read and understand the story - Ask students about Bob and Basim to make them remember the story before starting the next part. - Ask students to read the story silently.	10 min
	2- Answer the questions - Ask students to answer the questions under the teacher's supervision. - Ask students to write a paragraph according to instructions on P. 47 "Activity Book".	15 min
	3- Recognize new words - Students will new words with their definitions. - Ask students to match words to their suitable definitions, exercise B. from "Activity Book" P 47.	10 min

R

Reading

www.frenghish.ru

- 1 66 Read the article quickly. How many expeditions does it mention?

EXPERIENCES

Sarah Marquis's love of adventure started when she was a child. She discovered bats in a cave near her home in Switzerland. She likes bats, so she stayed in the cave that night. Sarah wasn't scared – she loved it. That day, she decided to be an explorer.



“ I walked for three years. ”

Sarah Marquis, 42, explorer

Sarah explores wild places because she likes to feel independent and close to nature. She always travels alone and she doesn't use transportation – she walks. She carries a tent, clothes, and food (mainly rice and cookies) in a backpack, or she pulls her things in a cart. She never stays in hotels, so she doesn't meet many people.

While she's walking, she's always busy, so she never gets bored. She looks for water, fruit, and vegetables for her dinner, and a new place to camp every night. She also takes pictures and makes notes.

In 2010, she started an amazing 16,000-kilometer journey: she hiked from Russia to Australia. On this expedition, she was alone in the Gobi Desert for six months. Slowly, her sense of smell became very strong. She even smelled the shampoo on a tourist's hair from a distance of 1,000 meters! Unusual experiences like this are why Sarah loves to explore.



- 2 Read the article again. Choose the correct answers.

- | | |
|--|--|
| 1 Sarah Marquis stayed in a cave because she ... | 4 Sarah doesn't meet many people because she ... |
| a was an explorer. | a is tired. |
| b likes bats. | b always camps. |
| c was scared. | c has a cart. |
| 2 Sarah likes wild places because she ... | 5 Every day, Sarah ... |
| a comes from Switzerland. | a finds a place to camp. |
| b has a tent and a backpack. | b carries her backpack. |
| c is independent and loves nature. | c eats rice and cookies. |
| 3 On expeditions, Sarah always ... | 6 In the Gobi Desert, Sarah smelled ... 1,000 meters away. |
| a goes by car. | a an animal |
| b pulls a cart. | b a person |
| c walks. | c some food |

- 3 In pairs, discuss the questions.

- What can you see in the pictures?
- How do you think Sarah feels while she is walking long distances?
- Think of an interesting place to explore.
 - What clothes do you need?
 - How can you travel while you are there?
 - What wild food can you find there?

Lesson Plan 13 – Experimental Class

Lesson Topic: Experiences		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio – worksheet		
Lesson objectives: By the end of the lesson, the student will: Improve reading skills		
Stage	Procedure	Time
Warm-Up & Objective discussion	The students will listen to the text by playing audio. Then ask them what they understand.	5 min
Activities	- Skimming 1- Ask students to read the article quickly and ask them how many expeditions does it mention?	5 min
	2- Before students move on to the next exercise, put students into two groups and ask them to read the article. Then each group will summarize what they read to the others (Another dimension principle).	15 min
	3- Ask students to read the article again and choose the correct answers to ensure their comprehension.	5 min
	4- Ask students to imagine that they are explorers and write about some things they explore. Then, they will edit their writing by themselves under the teacher's control. (self-service principle)	10 min

Lesson Plan 13 – Control Class

Lesson Topic: Experiences		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio – worksheet		
Lesson objectives: By the end of the lesson, the student will: Improve reading skills		
Stage	Procedure	Time
Warm-Up & Objective discussion	The students will listen to the text by playing audio. Then ask them what they understand.	5 min
Activities	- Skimming 1- Ask students to read the article quickly and ask them how many expeditions does it mention?	5 min
	2- Before students move on to the next exercise, read through the text again with the class and explain any vocabulary that students find difficult.	15 min
	3- Ask students to read the article again and choose the correct answers to ensure their comprehension.	5 min
	4- Ask students to imagine that they are explorers and write about some things they explore.	10 min

A biography

1 Read the biography. Where does the writer live?

Aunt Florence

My Aunt Flo was born in 1976 in Boston and she grew up in the United States. Her real name is Florence. She left high school when she was 17. Before she went to college, she worked in her parents' restaurant. She was a terrible cook! In college, she studied modern languages. She met my mom's brother, Uncle Ramon, in college. After they graduated, they got married in Las Vegas. They decided to live in Spain, so they bought an apartment in Málaga. Aunt Flo learned Spanish. She became an English teacher. Uncle Ramon and Aunt Flo had two children, my cousins Luz and Nando. They live in Barcelona now, so we go to the beach there with them.



2 Complete the chart with the green information from the biography.

A biography	
Name	1. Aunt Flo, Florence
Was born	2. _____
Grew up	3. _____
Left high school	4. _____
In college	5. _____
Got married	6. _____
Became an	7. _____
Children's names	8. _____
Lives	9. _____

3 Read the tip.

Tip

Good writers use *before* and *after*.

We use *before* and *after* to show the order of events.

Before she went to college, she worked in a restaurant. = First, she worked in a restaurant. Then, she went to college.

After they graduated, they got married. = First, they graduated. Then, they got married.

Write sentences with *before* or *after*.

1 First, he graduated. Second, he worked in a bank. (after)

He worked in a bank after he graduated.

2 First, they got married. Second, they bought an apartment. (after)

3 First, she traveled to Asia. Second, she started college. (before)

4 First, he left college. Second, he met a girl and got married. (after)

5 First, they had a baby. Second, they moved to Tokyo. (before)

4 Copy and complete the chart in exercise 2 with information about a person you like.

5 Write a biography about a person that you like.

- Use your chart in exercise 4.
- Use the biography in exercise 1 as a model.
- Use *before* and *after* to show the order of events.
- Include a picture of the person with your biography.

Lesson Plan 14 – Experimental Class

Lesson Topic: A biography		Lesson Duration: 40 minutes
Materials: whiteboard – book – a notebook - computer		
Lesson objectives: By the end of the lesson, the student will: Define and explain what a biography is. Read an example of a biography Compose a biography		
Stage	Procedure	Time
Warm-Up & Objective discussion	The students should be informed that they will be taking notes while watching a biography of a famous person.	5 min
Activities	1- Explain to students what a biography is and what it includes by displaying a video https://youtu.be/w0mtAn-gX9A (Composite structure principle).	5 min
	2- Students will scan the text and complete the chart to ensure their understanding.	5 min
	3- Read through the tip with the class and check that students understand the meaning of before and after. <Point out that we use a comma at the end of the clause>. Ex. (Before she went to college, she ...).	10 min
	4- Put students to do the exercise 3 P. 106 "before and after". Then they will correct according to model sentences (Self-service Principle).	5 min
	5- Ask students to write a biography about someone they choose, and they have to use before and after to show the order of events. Then, put students into pairs and ask them to provide their feedback to each other (Feedback Principle).	15 min

Lesson Plan 14 – Control Class

Lesson Topic: A biography		Lesson Duration: 40 minutes
Materials: whiteboard – book – a notebook - computer		
Lesson objectives: By the end of the lesson, the student will: Define and explain what a biography is. Read an example of a biography Compose a biography		
Stage	Procedure	Time
Warm-Up & Objective discussion	The students should be informed that they will be taking notes while reading a biography of a famous person.	5 min
Activities	1- Explain to students what a biography is and what it includes.	5 min
	2- Students will scan the text and complete the chart to ensure their understanding.	5 min
	3- Read through the tip with the class and check that students understand the meaning of before and after. <Point out that we use a comma at the end of the clause>. Ex. (Before she went to college, she ...).	10 min
	4- Put students to do the exercise 3 P. 106 "before and after" with the teacher.	5 min
	5- Ask students to write a biography about someone they choose, and they have to use before and after to show the order of events.	15 min

Unit 5

Lesson 1

AB64

Old ways of sending information

Read and use the pictures to work out the meaning of these words:

horse lighthouse flag drum smoke signal pigeon



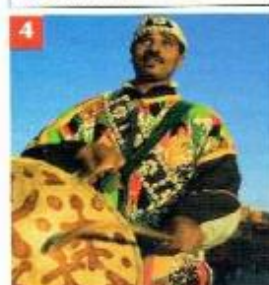
1 In the Arab world, men used to ride for hours carrying messages. When one horse was tired, they got another one. This messenger service started in 670. It was called Albarid.



2 People used to build lighthouses near the sea. The lighthouses warned ships of danger.



3 People used to send messages using flags.



4 In Africa, people used to use drums to send messages.



5 Americans used to light fires on the tops of mountains and send messages using smoke signals.



6 People used to use pigeons to carry messages from Egypt to Syria. A good pigeon could fly from Cairo to Damascus without stopping.

Now talk about these questions:

- 1 When was the best time to use lighthouses – day or night? Why?
- 2 How did pigeons know where to take their messages?
- 3 Which of these methods was ... the fastest? ... the slowest? ... the safest?
- 4 How many modern ways of sending information can you think of?



Lesson Plan 15 – Experimental Class

Lesson Topic: Old Ways of Sending Information		Lesson Duration: 40 minutes
Materials: whiteboard – book – Pictures - Video		
Lesson objectives: By the end of the lesson, the student will: Define old ways that were used for sending information Compose a paragraph		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will begin the lesson by talking about new ways of sending information and then he will ask students how people were used to sending information?	5 min
Activities	1- Show some pictures and ask students: "what do you think these pictures mean?" If they are unfamiliar with any of them. The teacher will show a video about old ways of sending information. (Composite structure principle)	10 min
	2- Ask students to read the text and elicit the meaning of new words.	5 min
	3- Students will answer the questions at the bottom of the page. They will discuss and provide each feedback. (Feedback principle).	10 min
	4- Ask students to write about the difference between the old and modern ways of sending information. {before writing students will brainstorm some ideas that make the writing task easier – Preliminary Action Principle)	10 min

Lesson Plan 15 – Control Class

Lesson Topic: Old Ways of Sending Information		Lesson Duration: 40 minutes
Materials: whiteboard – book – Pictures		
Lesson objectives: By the end of the lesson, the student will: Define old ways that were used for sending information Compose a paragraph		
Stage	Procedure	Time
Warm-Up & Objective discussion	The teacher will begin the lesson by talking about new ways of sending information and then he will ask students how people were used to sending information?	5 min
Activities	1- Show some pictures and ask students: "what do you think these pictures mean?" If they are unfamiliar with any of them. The teacher will write words on the board randomly and then ask students to guess which word best describes each picture.	10 min
	2- Ask students to read the text and elicit the meaning of new words.	5 min
	3- Students will answer the questions at the bottom of the page.	10 min
	4- Ask students to write about the difference between the old and modern ways of sending information	10 min

A vacation postcard

- 1 Read the instructions. What can you do with the *sendmypostcard* app?

Instructions for using the *sendmypostcard* app.

Reviews ★★★★★☆

- 1 Take a picture.
- 2 Write your postcard and the address.
- 3 Press SEND.
- 4 We print your postcard and send it to the address!



INSTALL



- 2 Read the postcard. Complete the chart.

Where is Mari?	1 Tokyo, Japan
Why?	2
Why is Harajuku popular with young people?	3
What is Mari doing?	4

- 3 Read the tip.

Tip

Good writers use contractions in informal writing, e.g. a postcard or an e-mail to a friend.

The verb be:

I am on vacation. → *I'm on vacation.*

That is "See you!" → *That's "See you!"*

Negatives

I do not like → *I don't like*

Rewrite the sentences. Use contractions where possible.

- 1 We are not staying in a hotel because we are visiting friends.

We aren't staying in a hotel because we're visiting friends.

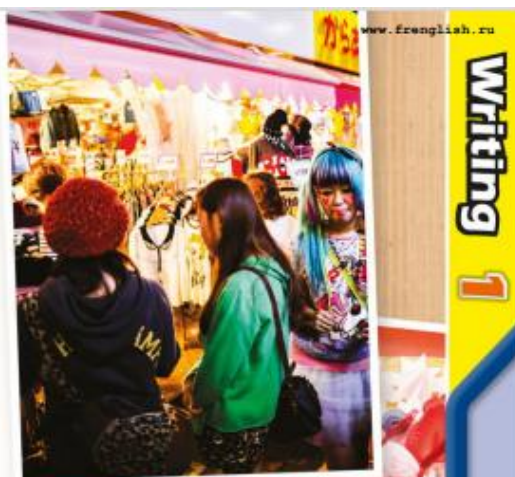
- 2 My sister does not sunbathe because she thinks it is boring.

- 3 I can swim, but I cannot surf.

- 4 I am thirsty, but I do not have any water.



Online Homework



Hi Julia,

I'm on vacation in Japan! We're visiting my grandparents and my cousins.

This is a picture of Harajuku. It's a district in Tokyo with a lot of fashion stores for teenagers. My cousins and I are here now. Some people are wearing costumes of their favorite cartoon character. They look really amazing!

Harajuku is also famous for its Japanese pancakes. I'm eating one now. It has fruit and cream in it. I don't like all Japanese food, but I love these.

Jaa mata! (That's "See you!" in Japanese.)

Mari x

- 4 Imagine you are on vacation. Copy and complete the chart in exercise 2 for you. Change the **green** information.

- 5 Write your postcard for the app.

- Use your chart in exercise 4.
- Use the postcard in exercise 2 as a model.
- Use contractions.
- Print and include a picture.

one hundred one

101

Lesson Plan 16 – Experimental Class

Lesson Topic: A Vacation Postcard		Lesson Duration: 40 minutes
Materials: whiteboard – book – Postcard sample		
Lesson objectives: By the end of the lesson, the student will: Writing a postcard about vacation. Practice using contractions in informal writing.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Introduce postcards to the class by showing an example. Ask students if they have ever received postcards, sent them, or have seen them at a gift shop.	3 min
Activities	1- (Preliminary Action Principle) let students respond and discuss their ideas through the questions about the purpose of a postcard. Lead them to conclude that: - Postcards are short letters. - They don't need envelopes. - People usually send postcards when they are away on vacation. - The messages are short and simple, and not too personal because the mail carrier can read the message as well. - Usually, the sender describes their location and what they are doing.	7 min
	2- Students will be asked to fill the gaps in the charts, and they will evaluate each other providing feedback. (Feedback Principle).	10 min
	3- Read the tip about using contractions in informal writing. Explain that contractions could be used for writing postcard invitations.	5 min
	4- Practice writing using contractions working in pairs then correct their writing according to a model sentence under the teacher's supervision. (self-service principle).	5 min
	5- Provide students with a formal invitation and ask them to rewrite a postcard invitation. (Blessing in disguise principle).	15 min

Lesson Plan 16 – Control Class

Lesson Topic: A Vacation Postcard		Lesson Duration: 40 minutes
Materials: whiteboard – book – Postcard sample		
Lesson objectives: By the end of the lesson, the student will: Writing a postcard about vacation. Practice using contractions in informal writing.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Introduce postcards to the class by showing an example. Ask students if they have ever received postcards, sent them, or have seen them at a gift shop.	5 min
Activities	1- Read through the questions in the chart then students read the postcards.	5 min
	2- Students will be asked to fill the gaps in the charts on their own then they will correct them with the teacher.	10 min
	3- Read the tip about using contractions in informal writing and Ask students to copy the chart in ex. 2 and complete it with information about their vacation.	10 min
	4- Write your postcard for the app Ex. 5 according to instructions.	10 min

V

Vocabulary

Habitats

- 1 Look at the poster and label the habitats.

beach desert farmland forest island
lake ~~mountain~~ ocean river

- 2 40 Listen, check, and repeat.



- 3 Complete the sentences.

- More than 40% of the Earth's land is farmland for plants and animals.
- Cuba is an _____ in the Caribbean Sea.
- It's very dry in the Atacama _____.
- Copacabana is a famous _____ in Rio de Janeiro.
- Everest is a _____ in the Himalayas.
- The Atlantic is the _____ between Africa and America.
- The Amazon is a _____ and a _____.
- There are four big _____ near Chicago, in the center of North America.

fifty

→ METRO EXPRESS p.120

50



Workbook p.77



Online Homework

L

Listening

Endangered animals

- 1 41 Look at the pictures and read and listen to the text. Do you know any other endangered animals?

Some wild animals are endangered. "Endangered" means that there aren't many of them in the wild and their future isn't certain. Sometimes this is for natural reasons. Sometimes it's because of human activity.



American alligator



coral snake



panda



tiger

- 2 42 Listen and complete the sentences.

1900 3,200 5,000 2013 400,000

- There were over 100,000 wild tigers in _____.
- By _____, there were _____ wild tigers.
- In the U.S., there are _____ tigers in private collections and zoos!
100 240 1,865 2015
- _____ years ago, there were thousands of pandas in South China.
- By _____, there were _____ wild pandas.
- There are around _____ pandas in zoos.

- 3 42 Answer the questions. Listen and check.

- What habitats do tigers and pandas share?
- What are humans doing to these habitats? Why?



Vocabulary

Listening

Lesson Plan 17 – Experimental Class

Lesson Topic: Habitats		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio		
Lesson objectives: By the end of the lesson, the student will: Talk about habitats Listen to a conversation about endangered animals.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students about animals, {where do animals usually live}. Ask about people, {where do people usually live}.	5 min
Activities	1- Students will look at the poster and label the habitats. Then complete the sentences according to the habitats and correct them according to audio under the teacher's supervision. (self-service principle).	10 min
	2- Students will listen to audio and try to fill the gapped pictures and correct their answers by comparing in pairs under the teacher's supervision. (Feedback principle).	10 min
	3- Listening: what does endanger mean?	10 min
	4- Students read sentences and complete them with numbers.	10 min
	5- Ask students to answer ex. 3 then listen and check.	5 min

Lesson Plan 17 – Control Class

Lesson Topic: Habitats		Lesson Duration: 40 minutes
Materials: whiteboard – book – audio		
Lesson objectives: By the end of the lesson, the student will: Talk about habitats Listen to a conversation about endangered animals.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students about animals, {where do animals usually live}. Ask about people, {where do people usually live}.	5 min
Activities	1- Students will look at the poster and label the habitats. 2- Students will complete the sentences and check their answers by listening to audio with teacher. 3- Listening: what does endanger mean? 4- Students read sentences and complete them with numbers. 5- Ask students to answer ex. 3 then listen and check.	5 min 10 min 10 min 10 min

R

Reading

www.funenglish.com

- 1  17 Read the text quickly and choose the correct answer.

A tornado is:

- a a fast vehicle, for example a car or a truck.
- b very windy weather with a lot of rain and dark clouds.
- c a popular vacation activity.

- 2 Label the things in the pictures.

first-aid kit flashlight ~~truck~~
video camera water

- 3 Read the text. Complete each sentence with two words.

- 1 Katy goes o online to check the w _____.
- 2 People often feel s _____ o _____ tornadoes.
- 3 Katy chases storms in a b _____ t _____.
- 4 Katy and her friends take f _____ to eat and w _____ to drink.
- 5 Katy's friend i _____ f _____ the tornado with a video camera.

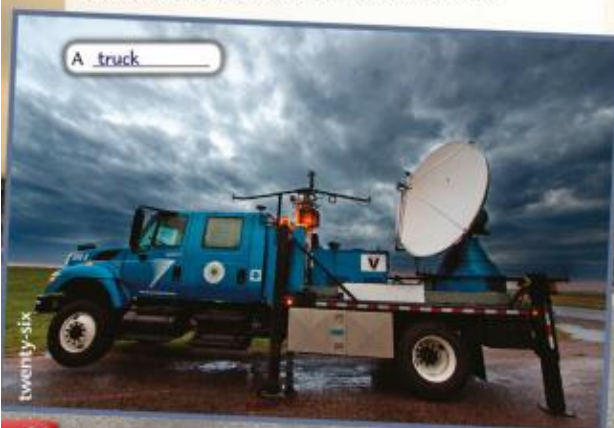
KATY HARTMAN

STORM CHASER

What do you do on weekends? A lot of people watch a movie or go shopping. But not Katy Hartman. On weekends, Katy's a storm chaser.

On Friday evening, I go online and I look at the weekend weather. I'm always excited when there's a tornado in my area. Tornadoes are funnels of wind – they're fast and dangerous. People are often scared of tornadoes, but I love them because they're exciting to watch.

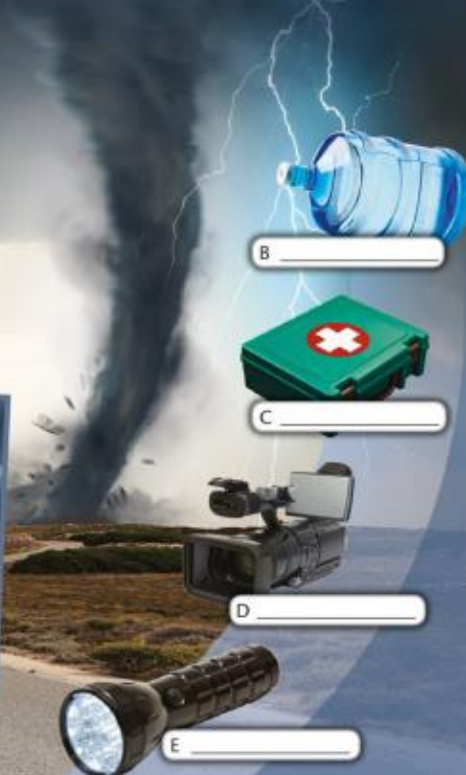
My friends and I have a big truck for chasing storms. We take video cameras, food and water, flashlights, and a first-aid kit. Then we look for the storm. In this picture, we're chasing a big tornado in Oklahoma. It's very windy and I'm watching the tornado. My friend is filming it with the video camera. Suddenly, the tornado is only 800 meters away and it's moving fast towards us. It's time to get in the truck and go!



A truck

twenty-six

26



B _____



C _____



D _____



E _____

Lesson Plan 18 – Experimental Class

Lesson Topic: Storm Chaser		Lesson Duration: 40 minutes
Materials: whiteboard – book – pictures		
Lesson objectives: By the end of the lesson, the student will: Understand a text about a woman who is a storm chaser. Recognize what is tornado.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students: 'What's the weather like when there's a storm?' Then, show some pictures and explain what the meaning of the storm is.	5 min
Activities	1- Ask students to read the text and highlight the new words using different colors of highlighter. (Colors change principle).	8 min
	2- Ask students to re-read the text quickly to know and identify the meaning of Tornado and complete exercise 3.	7 min
	3- Put students into two groups and ask them to label each word with a suitable picture. Then they correct each other under the teacher's supervision. (self-service principle)	10 min
	4- Ask students to write about their feeling when the weather is stormy and what they do (Periodic Action Principle).	10 min

Lesson Plan 17 – Control Class

Lesson Topic: Storm Chaser		Lesson Duration: 40 minutes
Materials: whiteboard – book – pictures		
Lesson objectives: By the end of the lesson, the student will: Understand a text about a woman who is a storm chaser. Recognize what is tornado.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Ask students: 'What's the weather like when there's a storm?' Then, show some pictures and explain what the meaning of the storm is.	5 min
Activities	1- Ask students to re-read the text quickly to know and identify the meaning of Tornado. 2- Ask students to re-read the text and complete the sentences with 2 words. 3- Put students into two groups and ask them to label each word with a suitable picture. 4- Extension Activity: - She feels excited. - Because they are exciting to watch. - It's in Oklahoma. - She's watching to the tornado.	5min 10 min 10 min 10 min

Unit 5

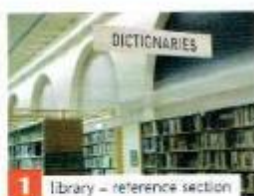
Lesson 2

AB64

31

Accessing information

Why would you go to these places?



1 library – reference section



2 internet café



3 information desk

Now read and check your ideas.

Most libraries have a reference section. You can't borrow the books in a reference section: you have to use them in the library. If you want to know where Berlin is, you can look it up in an atlas. If you want to learn about Saladdin, you can use an encyclopedia.

In some towns, there are internet cafes. If you need to use the internet, you can go to an internet cafe and pay to use a computer. You can talk to your friends on social net-

working sites, read the news or look at blogs.

Travellers can get information from the information desk at an airport or from a tourist office in a town.

They can find out about hotels, buses and taxis. They can also get local maps and find out about interesting places to go and things to see.



What information can you get from these things?

1 newspaper



2 dictionary



3 radio



Discuss in pairs. You need information about the things in the box. Where can you find it?

- how to grow plants
- a big world event
- the time of sunset
- the population of India
- when the museum is open
- the meaning of *encyclopedia*

Lesson Plan 19 – Experimental Class

Lesson Topic: Accessing Information		Lesson Duration: 40 minutes
Materials: whiteboard – book – pictures		
Lesson objectives: By the end of the lesson, the student will: Understand the importance of access to information. Know where they have access to the information they need.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Introduce the lesson by asking the opinion of the students. Do you think you have the right to all information? How can you make sure you get information?	5 min
Activities	1- Put students into two groups and ask them, if you wanted to find out something about a specific country you like, where might you look? Who might you talk to? (Preliminary action principle).	5 min
	2- Show students place pictures and ask them: 'why would you go to these places?' Then, the teacher will connect the reason for getting to specific places with the answers to the previous question referring that accessing information could be got from different resources.	5 min
	3- Put students into two groups and ask them to read the text P. 48. Then a spokesperson will summarize what they have read to other students. (Another dimension principle).	10 min
	4- Ask students to discuss in pairs "if you need information about a big world event" where can you find it? then individually write a paragraph about accessing information (Periodic action principle)	15 min

Lesson Plan 19 – Control Class

Lesson Topic: Accessing Information		Lesson Duration: 40 minutes
Materials: whiteboard – book – pictures		
Lesson objectives: By the end of the lesson, the student will: Understand the importance of access to information. Know where they have access to the information they need.		
Stage	Procedure	Time
Warm-Up & Objective discussion	Introduce the lesson by asking the opinion of the students. Do you think you have the right to all information? How can you make sure you get information?	5 min
Activities	1- Show students place pictures and ask them: 'why would you go to these places?'	5 min
	2- The teacher will read the text and then ask students to read it.	10 min
	3- Show pictures to the students and ask them: 'what information can you get from these things?' the teacher will write students' answers on the board.	5 min
	4- Ask students to discuss in pairs "if you need information about a big world event" where can you find it?	10 min
	5- Students will listen to a conversation and fill in the table (activity book).	5 min

S Speaking

Showing interest

- 1 44 Listen and read. Does Bella like chameleons?



- 2 45 Match 1–3 with a–c to make three conversations. Listen and check.

- 1 We have two fish, a snake, and three cats. _____
- 2 There are 200 different wild animals in this forest. _____
- 3 I have this amazing new game on my phone. _____
- a Really? Can I see it?
- b Are you serious? That's a lot of pets!
- c No way! Are there any monkeys?

- 3 46 Listen and repeat the phrases.

- 1 Really? 3 No way!
- 2 That's totally awesome! 4 Are you serious?

- 4 In pairs, practice showing interest. Use these ideas.

- I have (nine cousins / a new tablet / (your idea)).
- There are (three new students in my class / only 2,500 Bengal tigers in the world / (your idea)).

I have nine cousins.

Are you serious? That's a lot of cousins!

R Reading

- 1 47 Read the text quickly. How many people are there in the Davies family?

- 2 Read the tip.

Tip Good readers can recognize and understand abbreviations.

Find the seven **abbreviations** in the text. Match them with 1–7.

- | | | | |
|--------------|-----------|---------|-------|
| 1 kilometers | <u>km</u> | 5 with | _____ |
| 2 and | _____ | 6 years | _____ |
| 3 thanks | _____ | 7 you | _____ |
| 4 very | _____ | | |

- 3 Read the text again. Complete the sentences with numbers.

- 1 The Davies family is on a 12-month trip.
- 2 There was a terrible storm on February _____.
- 3 The storm was _____ km away.
- 4 There were people on Nikumaroro _____ years ago.
- 5 Their boat is ready to leave on March _____.
- 6 Samoa is _____ km from Nikumaroro.

- 4 Read the text again. Choose *T* (True) or *F* (False).

- 1 After the storm, the Davies are near a mountain. T ☐ F ☒
- 2 People offer to help the Davies. T ☐ F ☐
- 3 The Davies can repair their boat. T ☐ F ☐
- 4 There's a river on the island. T ☐ F ☐
- 5 The crabs take the Davies' water. T ☐ F ☐

- 5 Answer the questions.

- 1 Where is Nikumaroro?
It's in the middle/center of the Pacific Ocean.
- 2 How is Steve Davies telling their story?

- 3 Who is scared of the storm?

- 4 Why is life on Nikumaroro good?

- 5 What wild food can the family eat?



Lesson Plan 20 – Experimental Class

Lesson Topic: Wild Animals – Showing Interest		Lesson Duration: 40 minutes
Materials: whiteboard – book – highlighter		
Lesson objectives: By the end of the lesson, the student will: Recognize and use different expressions of interest Recognize the abbreviations		
Stage	Procedure	Time
Warm-Up & Objective discussion	Introduce the lesson with a riddle to motivate students and make them feel interesting to know the answer.	5 min
Activities	1- Ask students to look at the picture to guess Bella's feelings. Then, listen to audio and read.	5 min
	2- Students will match the sentences with the answers to complete conversations. Then, listen to the audio to check the answers.	5 min
	3- Ask students to read the text and highlight words that refer to interest. (Color change principle).	5 min
	4- Then, students will read the text quickly and complete the sentences with numbers and choose the correct answer.	10 min
	5- Put students into two groups and ask them to read the text and then each group will summarize what they read to others. (Another dimension principle)	10 min

Lesson Plan 20 – Control Class

Lesson Topic: Wild Animals – Showing Interest		Lesson Duration: 40 minutes
Materials: whiteboard – book –		
Lesson objectives: By the end of the lesson, the student will: Recognize and use different expressions of interest Recognize the abbreviations		
Stage	Procedure	Time
Warm-Up & Objective discussion	Introduce the lesson with a riddle to motivate students and make them feel interesting to know the answer.	5 min
Activities	1- Ask students to look at the picture to guess Bella's feelings. Then, listen to audio and read.	5 min
	2- Students will match the sentences with the answers to complete conversations. Then, listen to the audio to check the answers working with the teacher.	10 min
	3- Students will read the text quickly and complete the sentences with numbers and choose the correct answer.	10 min
	4- Put students into two groups and ask them some questions about the text to ensure their understanding.	10 min

VITAE

Batoul Alkasem. She graduated from English Literature Department. She worked as an English teacher from 2015 to 2017, then she started a new career with Humanitarian Organizations. She speaks English and Arabic fluently and she is learning the Turkish language.

ÖZGEÇMİŞ

Batul Alkasem. İngiliz Edebiyatı Bölümü'nden mezun oldu. 2015-2017 yılları arasında İngilizce öğretmeni olarak çalıştı, ardından İnsani Yardım Kuruluşlarında yeni bir kariyere başladı. Akıcı bir şekilde İngilizce ve Arapça bilmekte ve Türkçe öğrenmektedir.