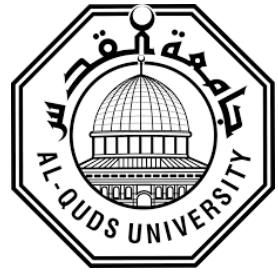


**Deanship of Graduate studies**

**Al-Quds University**



**The Effect of Using "Six Thinking Hats Strategy" to  
Improve Eighth Graders' Reading Comprehension Skills  
and Developing their Creative Thinking skills at  
UNRWA Schools**

**Tamara Farid Sabri Al Masri**

**M.Sc. Thesis**

**Jerusalem – Palestine**

**1441 - 2020**

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**Prepared by:**

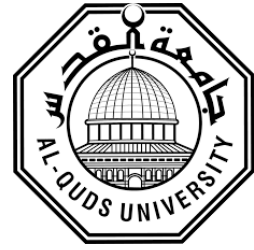
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**Supervised by: Dr. Majde Hamayel**

**A thesis Submitted in Partial Fulfillment of  
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Methods from the Faculty of Graduate studies at Al-  
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Al-Quds University  
Deanship of Graduate studies  
Teaching Methods



### **Thesis Approval**

## **The Effect of Using "Six Thinking Hats Strategy" to Improve Eighth Graders' Reading Comprehension Skills and Developing their Creative Thinking skills at UNRWA Schools**

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Signature .....

Jerusalem – Palestine

1441/2020

## **Dedication**

*I dedicate this humble work to my father who taught me giving without waiting, to whom I bear his name with all pride, to my mother who provided me with affection and love. To the kind, pure hearts in my life, my beloved brothers and my compassionate sister. Thank you.*

*My love for you all can never be quantified. God bless you.*

## **Declaration**

I certify that this thesis is submitted for the degree of master and it is the result of my own research, except where for some excerpts noted in the research, and that this thesis has not been submitted for the higher degree to any other university or institute.

Signed:

Name: Tamara Farid sabri Al Masri

Date: 4/1/ 2020

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Tamara Farid Sabri Al Masri

## **Abstract**

The present study aimed at investigating the effect of using the **Six Thinking Hats Strategy** on students' development in reading comprehension skills and creative thinking skills of eighth graders. The study has been applied on a sample of 8<sup>th</sup> graders in UNRWA schools, in Jericho district in the academic year 2019/2020. The population of the study was (256) students of 8<sup>th</sup> grade (124 male) and (132 female) from Aqbat jaber girls school, Aqbat jaber boys school and Ein El Sultan school. The sample included (82) female students divided into a control group of (41), which was taught by the normal method, and an experimental group (41), which was taught by using the six thinking hats strategy. A creative thinking test and reading comprehension test were prepared. Content validity and reliability was constructed for the instruments. It was (0.852) for the reading comprehension test and (0.976) for Torrance creative thinking test. The experimental lasted two months, a pre- test and a post-test were performed using the reading comprehension test and the creative thinking test to measure the effect of using the six thinking hats strategy. The means and standard deviation, (3-way ANCOVA) test, were used in the study. The findings of the study showed that there is statistically significant difference in the effectiveness of using the Six Thinking Hats strategy in improving the reading comprehension skills of 8th graders at UNRWA schools in Jericho due to the teaching method and in favor of the experimental group. In addition, there is statistically significant difference in the effectiveness of using the Six Thinking Hats strategy in developing creative thinking among eighth graders at UNRWA schools in the Jericho due to the teaching method and in favor of the experimental group. Based on those findings, activities and exercises depending on using the six thinking hats strategy should be prepared to enable students to comprehend and to think creatively, and not to be limited to

those that focus on information and knowledge. Special training courses and workshops for teachers should be held to apply the six thinking hats strategy.

**Key words: Six thinking hats strategy, reading comprehension skills, creative thinking.**

## الملخص:

تهدف هذه الدراسة إلى توضيح أثر استخدام استراتيجيات قبعات التفكير الست في تنمية مهارات فهم المقروء ومهارات التفكير الإبداعي لدى طلاب الصف الثامن. تم تطبيق الدراسة على عينة من طلاب الصف الثامن في مدارس الأونروا في منطقة أريحا للعام الدراسي 2020/2019. بلغ مجتمع الدراسة (256) طالباً بالصف الثامن (124 ذكور) و (132) إناث) من مدرسة بنات عقبة جبر، مدرسة ذكور عقبة جبر ومدرسة عين السلطان. شملت العينة (82) طالبة مقسمة إلى مجموعة ضابطة من (41) طالبة ، والتي تم تدريسها بالطريقة العادية ، ومجموعة تجريبية (41) طالبة، والتي تم تدريسها باستخدام استراتيجيات قبعات التفكير الست. تم إعداد اختبار فهم المقروء وتبني اختبار تورانس للتفكير الإبداعي. تم التأكد من صدق المحتوى والثبات للأدوات. كان (0.852) لاختبار فهم المقروء و (0.976) لاختبار تورانس للتفكير الإبداعي. تم استخدام اختبار المتوسط الحسابي وتحليل التباين الثلاثي (ANCOVA) في الدراسة. استمرت تجربته لمدة شهرين ، وتم إجراء اختبار قبلي وبعدي لفهم المقروء واختبار التفكير الإبداعي لقياس تأثير استخدام استراتيجيات قبعات التفكير الست. أظهرت نتائج الدراسة أن هناك فروق ذات دلالة إحصائية في فاعلية استخدام استراتيجيات قبعات التفكير الست في تحسين مهارات فهم المقروء لطلاب الصف الثامن في مدارس الأونروا في أريحا بسبب طريقة التدريس تعزى لصالح المجموعة التجريبية. بالإضافة إلى ذلك ، هناك فرق ذو دلالة إحصائية في فاعلية استخدام إستراتيجيات قبعات التفكير الست في تنمية التفكير الإبداعي لدى طلاب الصف الثامن في مدارس الأونروا في أريحا بسبب طريقة التدريس تعزى لصالح المجموعة التجريبية. بناءً على هذه النتائج ، ينبغي إعداد الأنشطة والتمارين التي تعتمد على استخدام استراتيجيات قبعات التفكير الست لتمكين الطلاب من الفهم والتفكير الإبداعي ، وألا تقتصر على تلك التي تركز على المعلومات والمعرفة. يجب عقد دورات تدريبية وورش عمل خاصة للمعلمين لتطبيق استراتيجيات قبعات التفكير الست.

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## **Chapter One**

**1.1 Introduction**

**1.2 Statement of the Problem**

**1.3 Objectives of the Study**

**1.4 Questions of the study**

**1.5 Hypotheses of the study**

**1.6 Significance of the Study**

**1.7 De-limitation of the study**

**1.8 Definitions of terms**

## **Chapter One: Introduction**

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### **1.1 Introduction:**

Organizing the educational situation requires teaching methods that lead to improving learners' learning ability to develop their personalities; this will not happen unless there is communication between the learner and the teacher away from the indoctrination.

The term teaching method refers to the general principles, pedagogy and management strategies used for classroom instruction. It is how the teacher deals with the method of teaching while performing the teaching process or it is the procedure used by the teacher in implementing the teaching method in a way that distinguishes him from other teachers who use the same method. It is recognized that there is no single method of teaching, but there are differentiated teaching styles and methods at different stages of education. The quality of the teaching method is determined by its compatibility with the desired educational goals taking into account learners' capabilities and raising their interest of learning and stimulates their thinking to enable them to confront problems and reach conclusions through scientific thinking. As for the cause of the weakness, some researchers pointed to the teaching methods used in education, as many teachers rely on the traditional methods of teaching the lesson of reading which deal with reading skill as a quick understanding of what the writer should say. Therefore, it is necessary to search for modern teaching methods and strategies that are concerned with the teaching of thinking and in accordance with the modern trends in teaching, such as the Six Thinking Hats strategy.

Thinking is a feature of human beings, and a mental activity that God distinguishes him from other beings. One of the most important goals of modern education is to develop thinking skills. It is a series of mental activities that the brain performs when it is exposed to a stimulus that is received by the five senses (touch, sight, hearing, smell and taste).

The six hats thinking strategy is, a way of thinking created by Edward De Bono, aims to clarify and simplify thinking to achieve greater effectiveness and to transform thinking from cross-thinking to deliberately thinking. Its advantages are: easy to learn and use - feed concentration and effective thinking - recognize feelings as an important part of thinking - practice different types of thinking such as critical thinking, creative thinking and emotional thinking. According to Bono (2004), “the Six Thinking Hats, however, encourages parallel thinking, where everyone explores all sides of an issue at the same time.” In conducting the study, the students, who consist of 6 members in a group, will be given the hats which had different functions in solving an issue: (a) White hat: thinks about the data, facts, information known or needed from the topic/problem; (b) Black hat: focuses on difficulties, potential problems and why something may not work; (c) Red hat: discusses about feelings, hunches, instinct, and intuition; (d) Green hat: discusses more about creativity, possibilities, alternatives, solutions, new ideas; (e) Yellow hat: focuses on values and benefits of why something may work; (f) Blue hat: discusses about process, focus, next steps, action plans and decision making about the topic/problem given.

Reading comprehension is defined as a constructional process through which the reader learns the meaning of word combinations in the context and uses explicit and implicit information in the text to understand the intended message contained in the text (Poorahmadi, 2012).

Students' acquisition of reading comprehension skills is one of the most important factors in learning any subject. Weakness in these skills, threatens students' academic, intellectual and cultural achievements, especially in the higher elementary stages, where the student depends, on his learning, on reading comprehension. According to the importance of reading comprehension, in terms of researchers interests, most of the results of previous studies and researches, confirmed students' weakness in understanding what they read.

Sitting in the back rows, turning her face right and left when the teacher asks a question. Sweats when asked to read a text or write a paragraph. Stuttering and seeing letters, numbers and lines tangled, barely can decode and analyze. The teacher ignores her and moves to another student, the whole class smiles and grudges which increase his embarrassment. She is a high school student, who does not know how she has reached this advanced stage, barely can read and write. As an English teacher who teaches eighth graders, I am very interested in this phenomenon, as I have observed it with eighth graders when I asked them to read. I was shocked when I found that some of them were unable to read a single word, and most of them don't understand what they read.

Creative thinking is a mental process that aims to solve a mathematical problem to reach authentic results based on fluency, flexibility and originality and is measured by the scores of students in the creative thinking test. It can be stimulated both by an unstructured process such as brainstorming, and by a structured process such as lateral thinking. Brainstorming is one form of creative thinking: it works by merging someone else's ideas with your own to create a new one.

The creative process is based on the human thinking style and his mental and intellectual approach to the events. Some scientists have tried to delve into the study and analysis of the human thinking process and sought to stereotype and divide it so that it can be easily dealt with. Edward de Bono, who benefited from his medical information about the brain in analyzing thinking patterns, has invented the six thinking hats strategy.

Solving problems using the six thinking hats requires using different types of thinking skills which achieve a conscious understanding and a complete comprehension of the idea or the topic. Teaching reading comprehension skills begins with literal comprehension skills such as extracting the main and partial ideas, arranging events and ideas that need the

white hats, which act as a researcher of information in the reading text, and arranging ideas according to their logical sequence.

Hence this study came to shed light on the effect of using the six thinking hats strategy to improve eighth graders' reading comprehension skills and developing their creative thinking skills.

## **1.2 Statement of the Problem:**

The purpose of this study is to illustrate the impact of using the Six Thinking Hats Strategy in the development of English as a foreign language, in the reading comprehension among Eighth graders and to develop their creative thinking. The problem of the study is to identify the students' ability to understand the text in English, using the Six Thinking Hats Strategy and to encourage them to develop their creative thinking skills in understanding and reading.

## **1.3 Objectives of the study**

The study aims to:

- 1- Identify the effect of using the Six Thinking Hats strategy in developing reading comprehension skills compared to the normal methods on a sample of eighth graders in UNRWA schools.
- 2- Identify the effect of using the Six Thinking Hats strategy in developing creative thinking compared to the normal methods on a sample of eighth graders in UNRWA schools.

## **1.4 Questions of the study:**

This study attempts to answer the main question:

How can the Six Thinking Hats strategy improve 8<sup>th</sup> graders' reading comprehension skills and develop their creative thinking?

**And the sub questions are:**

- 1- Is there a significant impact of using the Six Thinking Hats strategy in the development of reading comprehension skills among 8<sup>th</sup> graders due to teaching method?
- 2- Is there a significant impact of using the Six Thinking Hats strategy in the development of creative thinking skills among 8<sup>th</sup> graders due to teaching method?

**1.5 Hypotheses of the study:**

- 1- There is no statistically significant difference at the level of ( $\alpha \geq 0.05$ ) between the mean score of the degree of using the six thinking hats on the reading comprehension skills due to teaching method.
- 2- There is no statistically significant difference at the level of ( $\alpha \geq 0.05$ ) between the mean score of the degree of using the six thinking hats on the creative thinking skills due to teaching method.

**1.6 Significance of the study:**

The importance of this study comes from its findings and its importance in the field of English language curricula, as many studies have proven the effectiveness of this strategy in developing language skills and the students' achievement.

With reference to the educational literature and Arab researches in the study of six thinking hats strategy, I have found very little researches in this field in the Arab world, from here the researcher's interest was focused on studying the impact Use the Six Thinking Hats strategy to develop reading comprehension skills and creative thinking.

It is hoped that this study will benefit teachers and developers of curriculum in general and English curricula in particular, where they are given the opportunity to learn the role of the

six thinking hats strategy as one of the strategies to teach the students' comprehension skill when it is used.

This study contributes to enlightening educational supervisors and teachers on the importance of teaching methods diversification and to teach out of the usual method, which leads to teaching and learning improvement.

This study may help to provide students with self-confidence and accustom them to accept the criticism of others, how to criticize themselves, develop their creative thinking and solve their problems. So the researcher hopes that this study will be an addition and enrichment to educational literature.

### **1.7 De- limitation of the study:**

The de-limitations of the study are:

- 1- Human determinant:** Eighth graders of UNRWA schools in Jericho, Aqabt Jabr and Ein El Sultan Camps.
- 2- Spatial determinant:** Jericho Aqbat Jaber Camp.
- 3- Time- bound:** First semester of the academic year (2019/2020)

### **1.8 Definition of the study:**

The definitions of the study are:

**The Six Thinking Hats Strategy:** A way of thinking created by **Edward De Bono**, aims to clarify and simplify thinking to achieve greater effectiveness and to transform thinking from cross-thinking to deliberately thinking. According to Bono, “the Six Thinking Hats, however, encourages parallel thinking, where everyone explores all sides of an issue at the same time.” (De Bono, 1993)

**Reading comprehension:** Harris defined it as: the meaningful interpretation of the written language, the product of the interaction between the individual's perception of symbols

representing language, language skills, cognitive skills, and knowledge of the world. (Guessing & Karlsen, 2012).

**Reading strategies:** Are one of the main areas of interest recently. Most of the studies were focusing on the methods of teaching students English Language as a foreign language, and to use different strategies to improve their reading comprehension skills. Singhal (2001) has concluded that strategy training leads to improve reading performance. Carrel (1998) has mentioned that such strategies include skimming, scanning, predicting, guessing, making inferences, confirming or disconfirming inferences, identifying main idea, rereading, etc. Oxford (1990) has divided language learning strategies into two main classes, indirect and direct.

**Creative Thinking:** The process which we use when we come up with a new idea. It is the merging of ideas which have not been merged before. Torrance defines creative thinking as a process by which an individual becomes sensitive to perceiving problems, imbalances in information, missing elements and inconsistencies, then seek out the problem.

**Fluency** refers to the production of a great number of ideas or alternate solutions to a problem. Fluency implies understanding, not just remembering information that is learned. (Torrance, 2008)

**Flexibility** refers to the production of ideas that show a variety of possibilities or realms of thought. It involves the ability to see things from different points of view, to use many different approaches or strategies. (Torrance, 2008)

**Authenticity** involves the production of ideas that are unique or unusual. It involves synthesis or putting information about a topic back together in a new way. (Torrance, 2008)

**The Eighth graders:** are male & female students aged (13-14) and study English for Palestine 8 at UNRWA and governmental schools.

# **Chapter Two**

## **Review of the Related Literature**

### **2.1 Introduction**

### **2.2 Literature Review**

#### **2.2.1 Constructivism**

#### **2.2.2 Teaching strategies**

#### **2.2.3 The Six Thinking Hats Strategy**

#### **2.2.4 Reading skills**

#### **2.2.5 Creative Thinking**

### **2.3 Related Studies**

### **2.4 Summary**

## **Chapter Two: Theoretical Background and Related Studies**

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### **2.1 Introduction:**

This chapter presents the related literature and relevant studies to the effectiveness of using the six thinking hats strategy on students' reading comprehension skills improvement and their creative thinking development of English of eighth graders. This chapter consists of two sections; the first one will shed light on constructivism, teaching strategies, the six thinking hats strategy, reading comprehension skills, and creative thinking skills. In the related studies section, summaries of results of relevant studies will be given.

### **2.2 Literature Review.**

#### **2.2.1 Constructivism**

It is a theory of knowledge which explains that every individual builds his own knowledge by himself in the sense that knowledge is only a personal structure and a mental scheme by cognitive processes. Constructivism theory has now become one of the most important modern educational trends in the teaching and learning process. Therefore, it became necessary for the teacher to be sufficiently aware of this theory and its relationship to the teaching and learning process. Since knowledge cannot be shifted from one individual to another like a ware, the role of the teacher as knowledge provider in his class becomes debate. Educators must agree that knowledge is constructed in action and must be constructed by individual knower's; instruction must be student-centered where teachers act as facilitators (Akpan, Beard, 2016).

#### **2.2.2 Teaching strategies**

All the processes and activities that the teacher uses in the classroom and what he uses of educational methods and attitudes based on a plan that takes into account the level of

learners and their capabilities. Teacher may not use only one teaching method, but he can combine more than one if that may help the students in their learning.

Brown sees strategies as "specific methods of approaching a problem or task, modes of operation for achieving a particular end, planned designs for controlling and manipulating certain information. - They vary intraindividually; each of us has a number of possible ways to solve a particular problem, and we choose one—or several in sequence—for a given problem." (Brown, 2000, p.113)

Teaching process is a process of understanding and communication between two or more parties. According to the theory of communication - there must be a sender (teacher), who sends a message, and a recipient, who receives the message (student), through a certain channel. Therefore, we cannot say that a teacher has a successful teaching process if he has no one to learn from. Teaching cannot be described without talking at the same time about learning. In other words, learning does not depend on teaching. There are many things that we learn in our lives, without the help of a teacher, or from scholars and colleagues.

The researchers focused on the learners' own processes of acquiring knowledge, organizing this knowledge, and the factors that help improve learners' scholastic performance. These efforts resulted in what researchers call "learning strategies", which includes a set of interdependent and interrelated factors, which their source is the learner himself.

An effective learning strategy is based on a set of processes or steps that facilitate the learner to identify, store and use information, it is subdivided into: "direct" primary learning strategies; the strategies that are used directly with the text, including understanding, retention, retrieval, use, and "indirect" cognitive learning strategies that are used by the learner to achieve and maintain an appropriate learning mood, including planning and scheduling strategies. The learner uses the strategies to determine the

immediate and future goals to learn tasks, scheduling time, and monitor the progress in achieving the goals, with attention to factors that help the learner to reach a psychological state that qualifies him to learn. Strategies in turn, are divided into types; speaking, listening, reading, and writing strategies.

Reading strategies have been one of the main areas of interest recently. Most of the studies were focusing on the methods of teaching students English Language as a foreign language, and to use different strategies to improve their reading comprehension skills. Singhal (2001) has concluded that strategy training leads to improved reading performance. Many researchers were not able to give a common definition of "reading strategies" due to the differences in the context of the language learning. Brantmeier (2002) and Brown (1990) introduced skimming, scanning and guessing as effective strategies in reading. Carrel (1998) has mentioned that such strategies include skimming, scanning, predicting, guessing, making inferences, confirming or disconfirming inferences, identifying main idea, rereading, etc. Oxford (1990) has introduced many strategies, which she believes are relevant to successful reading and learning of foreign languages. She divides language learning strategies into two main classes, direct and indirect. Rubin (1987) classified language learning strategies as learning strategies, communication strategies and social strategies. According to Stern (1992), there are five main language learning strategies: management and planning strategies, cognitive strategies, communicative experiential strategies, interpersonal strategies and affective strategies in reading.

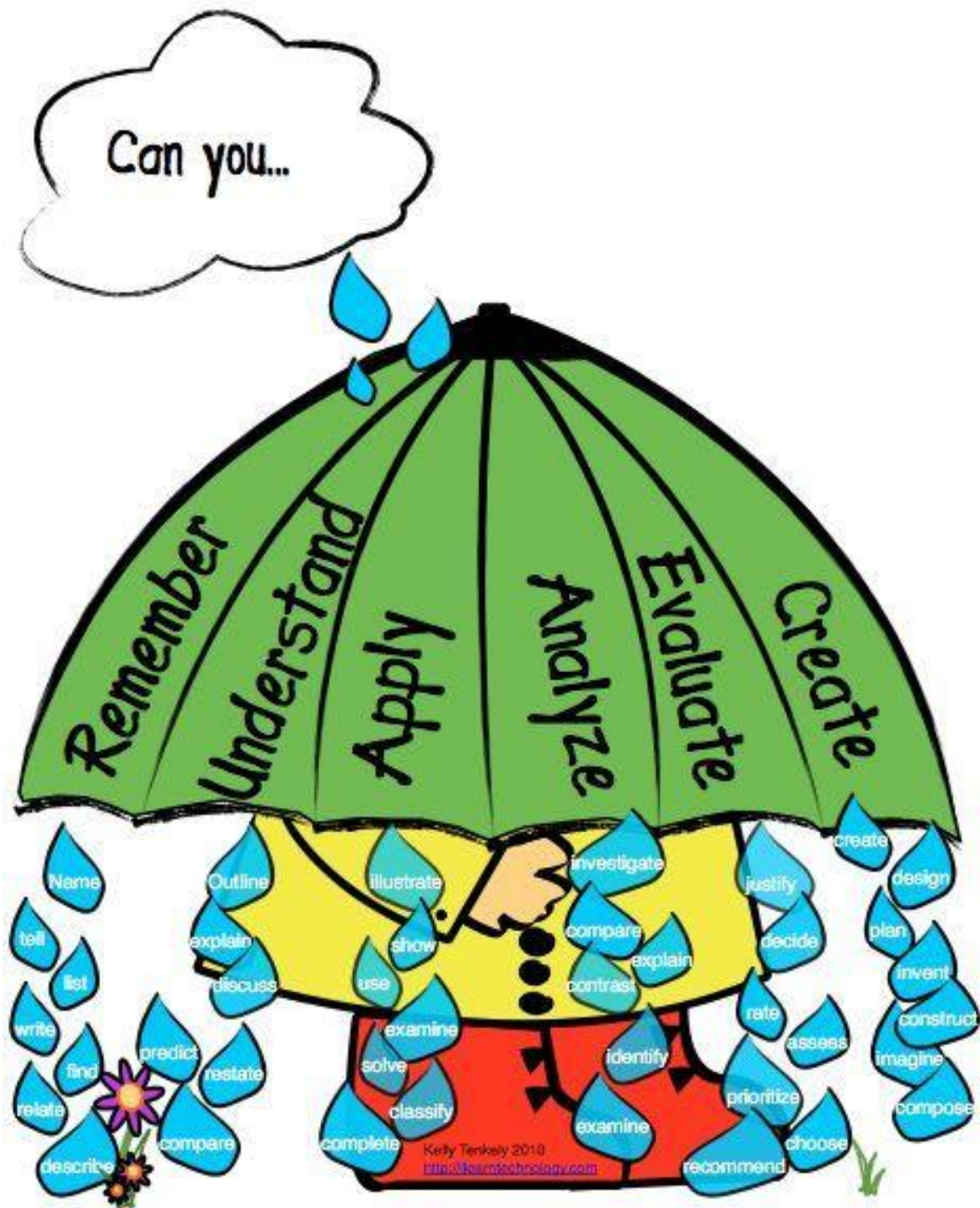
The aim of this study is to find out the best way to achieve effective reading and to decide the best techniques to use.

### **2.2.3 The Six Thinking Hats Strategy**

One of De Bono's modern thinking education programs, which is designed to simplify the process of thinking and to increase its effectiveness, which is based on six patterns of thinking used by the individual in his daily life. "Each of the six hats has a color, so that thinkers visualize and imagine the hats as actual. A white hat is neutral and objective and is concerned with objective facts and figures. A red hat suggests anger ('seeing red'), rage and emotions. A black hat represents somberness and seriousness, and cautious and careful thinking. A yellow hat represents positive feelings of optimism and hope. Green represents grass, vegetation, abundances and indicates creativity and novel ideas. A blue hat represents coolness (like the color of the sky) and is concerned with control and the use of other hats." (Goel, 2012).

Thus, I intend to see whether the STH Strategy and Critical Thinking, will give positive effects on the Reading Comprehension of the Eighth grade students of UNWA School.

With the intention of guiding students to focus their thoughts to achieve higher-order and critical thinking skills, the theoretical framework designed for this study as shown in Fig.1 connects the Six Thinking Hats Strategy with the Bloom's Taxonomy.



### **Bloom's Taxonomy Umbrella**

(<http://ilearntechology.com/?tag=bloomin-peacock>)

Kenny (2003) has conducted a study aimed at using the game of six hats to stimulate the critical and reflective thinking of qualified health professionals; the study was conducted on students of the Faculty of Nursing. The sample was asked to study the case and to think

about issues that interest them around. He concluded that the performance of the experimental group based on the six hats strategy was better compared to the control group. He added that there was a possibility of using the six hats to develop reflective and critical thinking in the field of education. In addition, Kenny found that the strategy reduces the psychological tension during the discussion. This result was attributed to the fact that this strategy regulates the individual's thinking.

#### **2.2.4 Reading skills**

Reading is a fundamental resource of language learning inside and outside the classroom, a skill that needs special and varied training. It is a complex process that simultaneously occupies the eyes, the brain, and the intelligence; and also a social activity which is based on a communicative function.

It is the most important skill to acquire any language. When learning a foreign language, the focus on reading skill must be intensified, due to its importance in building a solid foundation in language learning and to practice it properly.

While the ability to read and furthermore, to understand what is written, is critical to success in our educational system, our nation's report card in reading achievement is lackluster at best. Moreover, comprehension problems become most apparent when students are faced with textbook material. (Best, Floyd, & McNamara, 2008).

When we talk about comprehension during reading, we mean the process by which the learner creates his own understanding of what he reads, that is what readers must do deliberately to make sense of what they are reading.

Levine et al. (2000, p. 1) state: "The ability to read academic texts is considered one of the most important skills that university students of English as a Second Language (ESL) and English as a Foreign Language (EFL) need to acquire". Learning English is indispensable

in many aspects of our daily life, whether in traveling, studying or working. To learn and master any language, one must have the basic language skills: listening, reading, writing, speaking skills.

"I want students to understand that good readers have purposes other than pleasure for their reading." (Tovani, 2000). Every reading without a goal is a trip to the unknown. Once students have identified the purpose of reading, they can examine the source in their hands and find what works for them. For example, when it comes to a book, it is easy to look at its introduction and chapter titles, as both allow students to know the purpose of the book, and chapter titles provide an overview of the overall structure of the topic. "Once students see the importance of establishing a purpose when they read, it's time to teach them different purposes for reading. Access tools are specific materials and strategies that help students organize and synthesize their thoughts as they read. They make material more accessible. Students of all grade levels can use these tools with almost any type of material. They'll quickly figure out which tool works best for their particular purpose."(Tovani,2000). When the learner consciously chooses strategies that fit his or her learning style and the L2 task at hand, these strategies become a useful toolkit for active, conscious, and purposeful self-regulation of learning. "In order to meet the reading needs of students within the 21<sup>st</sup> century, educators are pressed to develop effective instructional means for teaching reading comprehension and reading strategy use." (Singhal, 2001).

In the past few years, people interested in reading have tended to be interested in studying the underlying causes of reading problems in general, and reading impairment in particular. Their interests have shifted from studying environmental and social causes that lead to low levels of reading performance among learners, to pay attention to the study of cognitive and metacognitive processes used by learners while reading, through which some causes of reading superiority and weakness can be recognized. This has made a significant progress.

It has revealed that there might be differences in the processes used in reading, which can be attributed to distinction and differences between the excellent and the less capable learners .

"Of all the skills students learn, reading is arguably one of the most important learning skills. Today, especially in the developed world, it is considered a fundamental skill required for success. Unfortunately, for many children with reading difficulties, learning to read is one of the most frustrating activities they will ever face. All too often, the barriers they face overshadow their desire to read, without proper guidance, they never overcome them." (Awad, 2013)

Reading is one of the most complex mental activities that requires knowledge of the form of the word, both audio and visually. It also requires thinking and predicting the meanings that words symbolize. It is more like solving problems, developing hypotheses, and verifying conclusions. Therefore, it is necessary to search for modern teaching methods and strategies that are concerned with the teaching of thinking, and in line with the recent trends in teaching, such as the Six Hats Thinking strategy .

Reading English as a second language is a serious problem for our students. Many students learn words only, and they are trying to arrange words together to form sentences correctly. What amazes me is the amount of words that they have, nevertheless, they cannot correctly form full sentences. The reason is that they have learned words but not sentences. Accordingly, the failure of the learner in this basic skill will affect successively on being able to master the other skills related of the language.

Students usually express their difficulties and frustration towards English language in many different ways, which all lead to the same target, "I hate English". The failure of the process of learning any foreign language is mainly due to learner's unwillingness to make

time, effort and attention in this regard. There is no doubt that motivation is the key to achieving goals actively and effectively. Maslow defined motivation as "internal state or condition that activates behavior and gives it direction; desire or want that energizes and directs goal-oriented behavior; influence of needs and desires on the intensity and direction of behavior."( Huitt, 2011). Students' low motivation towards learning is caused by many factors: false ideas about the importance of learning in the student's mind, lack of an appropriate educational environment for students' psychology and lack of activities associated with the learning process. Family and health problems, which cause inability to keep pace with students' peers, also have a deep effect on decreasing students' motivation. Moreover, no one can ignore the fact that, the time allotted for students to practice the language inside and outside the school, is insufficient. According to John & Ehow, "the problems of learning English language derived from many different factors in different environments such as school resources, class size, quality of teachers, and the school attendance of learners". (Souriyavongsa,Rany, Abidin, & Mei,2013).

In addition to motivation, there are other non lingualistic factors that may affect the learning process, the most prominent of which may be felt by some learners of anxiety and fear of making mistakes. Students may feel insecure or fearful of the learning process, whether because of their belief of the difficulty of the language, or their fear of making mistakes in front of the others. When anxiety, fear, and stress overwhelm English classes, it is an obstacle for students to learn and use the language."Anxiety is a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning process". (Dewaele & Al-Saraj,2013). The psychosocial factor plays a major role in the success or failure of the English language learning experience. This negative perception leads those who are learning English to lose confidence in their ability to learn and master the language.

Reading proficiency is an essential skill for all language learners. It provides the learner with an opportunity to train to draw ideas, keep information, interact with readable text, and know the sequence of the events and the basic ideas, and judging the ideas of the context. Students join school with varying abilities and individual differences. They learn how to read, in the early stages at school, if they find good care and appropriate teaching methods and tools. Students' reading levels vary depending on the difficulties they face, especially the verbal reading associated with shyness, as well as the lack of understanding and comprehension of what they read. Students face a reading crisis due to various factors: visual, neurological, auditory, logical, mental, emotional, social and cultural factors. (Kavaliauskienė, 2009).

### **2.2.5 Creative Thinking**

"Thinking is a unique resource in humans, which separates them from apes. Unfortunately, we are not content with our thinking, and in the process, we want to outsmart others to prove ourselves right. Thinking also creates confusion in our minds as we think about many things at once. Information, logic, emotions, control, creativity and hope: all crowd during our thinking. It is like, as the author describes, 'juggling with too many balls'. This parallel methodology allows a thinker to think one at a time. He/she separates logic from emotions, creativity from information and so on. He/she does it by wearing different colored hats, one at a time." (Goel, 2012)

Creative thinking is a process of feeding imagination, which allows thinking outside the box. The ability to train the mind thinking creatively helps to invent and solve problems and invent new means of communication. Successful people nowadays are people with great ability to think creatively. Practicing creativity on a daily basis leads to great success in the future. The most important thing is the feeling of freedom when trying to apply creative to life. Creativity means that you have the power and ability to expand your

imagination in advance of your potential. Edward de Bono notes creative techniques such as focus, challenge, alternatives, concepts etc. (Bono, 1993)

Interest in creative thinking has become an urgent need in all societies; educational institutions have put their focus on creative thinking at the top of the educational priorities. A review of the most common creative thinking tests, Torrance and Guilford, points to the most important creative thinking skills or abilities that researchers have attempted to measure. The majority of researchers and scholars in the field of creativity and creative thinking agree that this type of thinking includes three main skills (fluency, flexibility, authenticity).

From this point of view, the importance of exploring and knowing these abilities among our students and children as the first step in the development of creativity, is obvious.

Through my work in the educational sector for a few years, I have recognized that the students suffer from weakness in the English language, especially, in reading comprehension, and in thinking creatively . In this study, I am going to examine the effectiveness of using the Six Thinking Hats strategy to improve the reading comprehension skills for my students. I am going to teach my students how to organize their thoughts and develop their comprehension skills by using the Six Thinking Hats strategy.

### **2.3 Related Studies**

Few studies have been conducted with indirect relatedness to this study. These studies talk about the dependent variables (the reading comprehension and the creative thinking) in their relation with the independent variable (the six thinking hats strategy) each on its own. Many opinions and studies linked reading to comprehension, and made them two conditions to achieve good reading; it is clear that the goal of teaching reading, at all levels, is to develop the ability to understand, as the primary purpose of preparing a good

reader is to enable him to understand the contents of the printed material, no matter how difficult it is. If we train the child to form vocabulary, acquire the skill of knowing words and grow verbal ability in general, the goal is to be able to properly understand the meanings of these written symbols interpret them and translate them into meanings.

**(Hightower, 2019)** this study aimed to investigate if the Six Thinking Hats method will remediate and strengthen reading comprehension skills for students diagnosed with Specific Learning Disabilities (SLD). Participants of the study were Grade 9 and Grade 10 students enrolled in Intensive Reading classes at a Florida high school. The site chosen for observation was in Florida. The site selection had a student population of 2,661 students (Florida Department of Education, 2017). The student demographics consisted of: Caucasian 2,180, Hispanic 1,551, African-American 243 (Florida Department of Education, 2017). The gender demographics consisted of female 48% and male 52%, (Celebration High School, 2017). An experimental design was used, with students randomly assigned to either a control or experimenting (Thinking Hats) group. The control group did not receive the treatment; instead they received graphic organizers while the treatment group received the Six Thinking Hats reading comprehension instruction. Lexile scores from Achieve 3000 benchmarks (Level Set Test) and a Six Thinking Hats Criterion-Referenced Test were used as instruments. An analysis of covariance test (ANCOVA) was conducted on the Achieve 3000 Level Set test which determined students' Lexile levels. The results of this study showed no statistically significant difference in using the Six Thinking Hats with SLD students. However, the researcher believes that this approach can be beneficial with this population of students with modifications to implementation. The study recommended to be further extended with a mixed methods design and to use a larger sample size.

**(Ziadat & Al Ziyadat, 2016)** The aim of this study was to determine the effectiveness of a training program based on the six hats model in developing creative thinking skills and academic achievements in the Arabic language for gifted and talented Jordanian students. The study sample consisted of 59 gifted male and female students of the 7th grade from King Abdullah II Elite School at the Directorate of Education in Salt City, Jordan. The sample was carefully chosen from students in the academic year 2014 and was divided randomly into two groups: an experimental group of 27 male and female students and a controlling group of 32 male and female students. A training program was developed based on the Six Hats Model that tackled chapter 11 and 12 of the Arabic language syllabus of the seventh grade. Both groups had been given Torrance's B Test for creative thinking. Statistical tools and analysis on obtained data were applied including the analysis of Covariance (ANCOVA). The results of this research showed contradiction of statistical significance ( $\alpha \leq 0.05$ ) among the skills and measurements of the achievement test in favor of the experimental group. The authors strongly recommend that teachers and educators should be rehabilitated and trained to use and apply the latest educational methods and techniques such as: Alcott program, creative solutions of problems and obstacles, critical thinking, brainstorming, and to refrain from the conventional old methods used which commonly focuses on information storage and retaining crammed data, regardless of the active participation of students.

**(Ababneh, 2015)** This study aimed to investigate the effect of the Six Thinking Hats strategy on developing reading comprehension at the deductive level for the fourth graders in the Bani Kenana District. The sample of the study consisted of (80 male and female) students from the fourth primary class studying in Kafarsum primary school for boys and girls belonging to the Directorate of Education in the Bani Kenana district for the academic year 2012/2013. The methodology of the study was quasi. The two schools were chosen

intentionally for easy access, and to achieve the aims of the study, four sections of the two schools were randomly chosen and divided into two experimental groups of (40 male and female students), and a control group of (40 male and female students). A reading lesson entitled "From Zainab's Diary" was chosen from Arabic language book for the year (2012/2013), aiming to perform a multiple choice test as a study tool. The test was consisted of 24 paragraphs. The study found a statistically significant difference between the mean scores of the study sample students who learned according to the "Six Thinking Hats strategy" and "the normal method" in favor of the Six Thinking Hats strategy, which means the effectiveness of this strategy in developing reading comprehension at the deductive level of students. It was recommended to carry out similar studies on different levels and stages of education and conducting more studies on the gender variable to confirm the results revealed by this study.

**(Barhoom, 2013)** This study aimed to measure the impact of the use of the Six Thinking Hat Strategies in developing creative thinking skills and technology decision-making for tenth grade students. A sample of two sections (71 students from the tenth grade in Beersheba secondary school for Boys in Rafah), deliberately, was chosen, one of them representing the experimental group, and the other represents the control group, two approaches were used: Descriptive and Quasi. A test of creative thinking skills and a test of decision-making skills were used in this study. To verify the assumptions, the statistical program (SPSS) was used.

- To calculate the validity of the study tools, the researcher used the following statistical treatments: Internal Consistency.
- To calculate the stability of the study tools, the researcher used the following statistical treatments: Kuder and Richardson Formula 21 and the Split-Half method.

- T-test for approved values (within groups), and T-test for independent non-approved values (within groups).
- Measuring the processors effect strength to arrive to quantify the independent variable effect using the ETA square.

The results showed there are statistically significant differences at the level ( $0.05 \geq \alpha$ ) between the average grades of the experimental group students, and the average grades of the students of the control group in the post application of the creative thinking test for the benefit of the experimental group students, there are statistically significant differences at the level ( $0.05 \geq \alpha$ ) between the average grades of the experimental group students, and the mean grades of the students of the group controlling in the post application to test decision-making skills for the benefit of the experimental group. In light of the results of the study, it was recommended to provide the appropriate environment and educational materials to employ the six thinking hats strategy, and to pay attention to enrich the technology curriculum with enrichment materials and activities for thinking skills based on the Six Hats strategy to develop their creative thinking and decision-making skills.

## **2.4 Summary**

This chapter presented foreign and Arabic studies which dealt with the dependent and independent variables of this study. Through this chapter, it is found that there are a good number of studies which dealt with each variable alone. What makes this study unique is that the two dependent variables and the independent variable are connected. By implementing this study, it is hoped to be an addition to the English teaching experimental studies. The six thinking hats strategy has already been existed in the teaching-learning process, but as it is noticed, no studies have talked about it with its relation with reading comprehension skills and creative thinking skills all together.

## **Chapter Three**

### **Methodology and Procedures**

#### **3.1 Introduction**

#### **3.2 Method**

#### **3.3 Population of the Study**

#### **3.4 Sample of the study**

#### **3.5 Design of the study**

#### **3.6 Research Instruments**

##### **3.6.1 Reading comprehension test**

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###### **3.6.1.1 Test Validity**

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#### **3.7 Teaching materials**

#### **3.8 Teacher's Guide**

#### **3.9 Variables of the Study**

##### **3.9.1 Independent Variable**

##### **3.9.2 Dependent Variable**

## **Chapter Three: Methodology and procedures**

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### **3.1 Introduction**

This chapter presents the methods and procedures that the researcher follows to gather data. It gives information about the population, sample and steps of building the instruments of the study which include: reading comprehension test and Torrance creative thinking test. It describes also the validity and reliability of these instruments. Finally, it concludes a description of the research procedures and gives information about the research design and the statistical analysis used to analyze the data of the study.

### **3.2 Method**

This study followed the quasi-experimental design applied on two sections (experimental and controlled). The experimental group was taught by using (the six thinking hats strategy) while the other group was taught by the normal method.

### **3.3 Population of the study**

The population of this study comprised of eighth graders of UNRWA schools in Jericho, Aqabt Jabr Camp in the first semester of the academic year (2019/2020) and an exploratory sample of eighth graders of Ein El Sultan UNRWA School.

### **3.4 Sample of the study**

The sample of the study consisted of a control sample of 41 girls and an experimental sample of 41 girls. Class 8<sup>th</sup> grade was randomly selected to be the experimental group of 41 girls students studying with the six thinking hats strategy.

### **3.5 Design of the Study**

Subjects in this study were pre-tested using a reading comprehension test and a creative thinking test to determine their level of comprehension and thinking creatively. Four weeks

later, they were post-tested using the same instruments. The sample received the same instructions before they sat to the post-test. In this design the independent variable is the method of instruction:

- a. The six thinking hats strategy
- b. The normal method

On the other hand, the dependant variable was the reading comprehension skills' improvement and the creative thinking development on the per-posttest.

EG.R      O1 O2   X   O1 O2

CG.R      O1 O2   \_   O1 O2

EG:   Experimental Group   R:   Random treatment

CG:   Control Group            X:   Treatment

O1:   Reading comprehension   O2:   creative thinking

### **3.6 Research Instruments**

The researcher used two instruments to achieve the purpose of the study:

**3.6.1 Reading comprehension test:** A test has been designed to examine students' reading comprehension. The researcher built a reading comprehension test to measure the level of achievement of the sample. The test was consisted of four major questions. The first question was to answer four sub questions. The second question was to read and complete the notes. The third question was to find the meaning and the opposites and finally the fourth question was to decide whether the sentences are true or false. (appendix 2)

#### **3.6.1.1 Validity of Instruments**

To ensure that the content of the test is valid, the test was handed to a jury of five professional doctors in the field at Al-Quds and Al-Quds Open Universities. The panel of judges was asked to evaluate the appropriateness of the instruments to the whole purpose

of the study. They accepted the items, but they asked the researchers to follow some modifications. The researchers had taken them into account, and the final instrument was improved and distributed to the participants.

### **3.6.1.2 Reliability of Instruments**

A technique of a test-retest was used to ensure the reliability of the test. Fifteen students were selected from Ein Al Sultan School as an exploratory sample. Two weeks was the period between the test and the re-test.

**3.6.1.3 Cronbach's alpha stability coefficient** for the development of reading comprehension skills (0.852) and (0.976) for the development of creative thinking. This result indicates that this tool has the stability to meet the purposes of the study.

**3.6.2 Torrance creative thinking test:** The researcher adopted the Torrance Test of Creative Thinking-Figural and Verbal (TTCT-Figural and Verbal). The test was consisted of five activities. The first one was trying to improve the given stuffed toy rabbit so that it will be more fun to play with. The second one is to think what might be some things that would happen as a result of imagining being a magician. The third activity was to think of the maximum number of unusual uses of a pencil. The fourth activity was to add lines to the incomplete figures to make pictures out of them, and trying to complete stories with the pictures and to give them a title. The final activity was to add details to the shapes to make pictures out of them, Make the diamond a part of any picture they make. They were supposed to think of pictures no one else will think of, and finally to give the pictures titles. (Appendix 3)

## **3.7 Teaching Materials**

The teaching materials consist of desired results, lesson plans (appendix 6), six thinking hats activities (appendix 7), questionnaire (appendix 8) assessment evidence, instruction

for the teacher, postures, pictures, were used as materials in this study. Each activity consists of subject, aims, method, roles, materials, aids, procedures, and instructions used in the activities' parts. After each activity, there is an assessment part which is a worksheet or a questionnaire. The materials used in the activities are simple materials for teachers to apply and for students to practice even with groups or with pair works. Activities were built on one unit of the eighth grade text of the Palestinian Curriculum.

### **3.8 Teacher's Guide** (Appendix 5).

A teacher's guide was prepared which includes lesson plans for the chosen lessons of integrated skills allowed reading comprehension and creative thinking skills in English for Palestine 8 textbook for unit (1). In addition, instructions to implement the lesson plans and the aids required and needed.

### **3.9 Variables of the Study**

**3.9.1 Independent Variable:** A variable that affects other variables and is not affected by them. It is what the researcher has chosen from qualities that are qualitative or quantifiable to influence all or some of the other variables found in the scientific study. The independent variable in this study is the six thinking hats strategy.

**3.9.2 Dependent Variable:** The variable that follows the independent variable. The effect of the independent variable falls on the dependent variable; it is very easy to measure the effects on dependent variables, which showed the independent variable in the study. The dependent variables in this study are the reading comprehension skills and the creative thinking.

## **Chapter Four**

### **Findings of the Study**

#### **4.1 Introduction**

#### **4.2 Results of the Study**

##### **4.2.1 Results related to the first question**

##### **4.2.2 Results related to the teaching method**

##### **4.2.3 Result related to the second question**

##### **4.2.4 Results related to the teaching method**

#### **4.3 Summary**

## Chapter Four: Findings of the Study

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### 4.1 Introduction:

This chapter presents the findings of the study, which aims to investigate the effectiveness of using the Six Thinking Hats strategy to improve reading comprehension skills and develop creative thinking among eighth graders at UNRWA schools in Jericho. The results are presented in this chapter according to the dependent variables as follows:

### 4.2 Results of the study:

#### 4.2.1 Results related to the first question:

The Results related to the first question are:

Question 1: What is the impact of using the Six Thinking Hats strategy on improving reading comprehension skills of 8th graders at UNRWA schools in the Jericho? Does this effect vary according to the method of teaching?

To answer the first question, the researcher calculated the mean scores and standard deviations on the scale of reading comprehension skills.

To calculate the mean scores and standard deviations, students' marks in the control and experimental groups were considered on the scale of reading comprehension skills according to the teaching method, as in the following table:

**Table (4.1): Number, Means and standard deviations of students' scores of groups in reading comprehension skills**

Method	Pre – test			Post test		
	mean	Std. Deviation	N	Mean	Std. Deviation	N
Control group	1.0556	0.10578	41	1.1749	0.32921	41
Experimental group	1.0276	0.11530	41	1.6305	0.55183	41
Total	1.0416	0.11086	82	1.4027	0.50639	82

(Table 4.1) shows that there are statistical differences in the mean scores of students' marks in the reading comprehension skills test between the control and experimental samples.

To find whether the statistical differences in the mean scores of the students' marks were statistically significant at the level ( $\alpha \leq 0.05$ ), an analysis of three –way (ANCOVA) was carried out .The results of the analysis are shown in table below:

**Table (4.2): ANCOVA Test Results for students' marks in the test of reading comprehension skills according to the teaching method.**

Source	Sum of Squares	df	Mean Square	F	Sig
Pre - test	4.243	1	4.243	27.310	0.000
method	5.328	1	5.328	34.296	0.000
Error	12.273	79	0.155		
Corrected Total	20.771	81			

#### 4.2.2 Results related to the teaching method:

Table (4.2) shows that the value of (F) calculated for the total marks of the difference between the mean scores of both control groups (studied in the traditional method) and the experimental group (studied using The Six Thinking Hats Strategy), in the reading comprehension skills' test according to the teaching method for the total marks is (34.296), and that Sig is (0.000) which is lower than the significance level ( $\alpha \leq 0.05$ ). This indicates that there are statistically significant differences between the control group's marks compared to the experimental group's marks.

This revealed that there were statistically significant differences at ( $\alpha \leq 0.05$ ) for using the Six Thinking Hats strategy to improve reading comprehension skills among eighth graders at UNRWA schools in Jericho is attributed to the teaching method.

To find the source of the differences between the control and experimental groups, adjusted mean scores and dimensional standard errors of the teaching method variable were calculated, as in the following table:

**Table (4.3): Adjusted mean scores and dimensional standard errors of using the Six Thinking Hats Strategy to improve reading comprehension skills according to the teaching method.**

<b>Method</b>	<b>Mean</b>	<b>Std. Error</b>
Normal group	1.146	0.062
Experimental group	1.660	0.062

As shown in table (4.3), the average score of the control group studied in the normal way is (1.146), which is lower than the average of the experimental group (1.660), which indicates that the differences between the two groups were in favor of the experimental group.

#### **4.2.3 Results related to the second question:**

Question 2: What is the impact of using the Six Thinking Hats strategy on developing creative thinking among eighth graders in UNRWA schools in the Jericho area? Does this effect have an impact according to the method of teaching?

To answer the second question, the researcher calculated the mean scores and standard deviations on the scale of creative thinking.

To calculate the mean scores and standard deviations, students' marks in the control and experimental groups were considered on the scale of creative thinking according to the teaching method, as in the following table:

**Table (4.4): Numbers, mean scores and standard deviations of students' marks in the control and experimental samples in the creative thinking test, according to the teaching method in the pre and post tests.**

Area	Method	Pre – test			Post test		
		mean	Std. Deviation	N	mean	Std. Deviation	N
Fluency	Control group	9.20	3.516	41	8.85	3.623	41
	Experimental group	7.15	3.291	41	17.41	3.535	41
	Total	8.17	3.537	82	13.13	5.586	82
Flexibility	Control group	9.10	3.397	41	9.07	3.445	41
	Experimental group	6.34	2.997	41	15.32	3.205	41
	Total	7.72	3.472	82	12.20	4.561	82
Authenticity	Control group	2.10	1.744	41	1.73	1.397	41
	Experimental group	1.02	1.313	41	4.76	2.737	41
	Total	1.56	1.626	82	3.24	2.641	82
Total	Control group	6.797	2.5990	41	6.553	2.5118	41
	Experimental group	4.837	2.2275	41	12.496	2.7840	41
	Total	5.817	2.5995	82	9.524	3.9852	82

(Table 4.4) shows that there are statistical differences in the mean scores of students' marks in the creative thinking test between the control and experimental samples.

To find whether the statistical differences in the mean scores of the students' marks were statistically significant at the level ( $\alpha \leq 0.05$ ), an analysis of three –way (ANCOVA) was carried out .The results of the analysis are shown in table below:

Table (4.5): ANCOVA Test Results for students' marks in the creative thinking test according to the teaching method.

**Table (4.5): ANCOVA Test Results for students' marks in the creative thinking test according to the teaching method.**

Area	Source	Sum of Squares	df	Mean Square	F	sig
<b>Fluency</b>	<b>Pre - test</b>	555.294	1	555.294	93.380	0.000
	<b>method</b>	1931.216	1	1931.216	324.761	0.000
	<b>Error</b>	469.779	79	5.947		
	<b>Corrected Total</b>	2527.524	81			
<b>Flexibility</b>	<b>Pre - test</b>	433.142	1	433.142	75.618	0.000
	<b>method</b>	1171.652	1	1171.652	204.546	0.000
	<b>Error</b>	452.516	79	5.728		
	<b>Corrected Total</b>	1684.878	81			
<b>Authenticity</b>	<b>Pre - test</b>	65.018	1	65.018	16.432	0.000
	<b>method</b>	243.168	1	243.168	61.455	0.000
	<b>Error</b>	312.592	79	3.957		
	<b>Corrected Total</b>	565.122	81			
<b>Total</b>	<b>Pre - test</b>	299.026	1	299.026	89.699	0.000
	<b>method</b>	989.479	1	989.479	296.815	0.000
	<b>Error</b>	263.358	79	3.334		
	<b>Corrected Total</b>	1286.451	81			

#### 4.2.4 Results related to the teaching method:

Table (4.5) shows that the value of (F) calculated for the total marks of the difference between the mean scores of both control groups (studied in the traditional method) and the

experimental group (studied using The Six Thinking Hats Strategy), in the creative thinking test according to the teaching method for the total marks is (296.815), and that Sig is (0.000) which is lower than the significance level ( $\alpha \leq 0.05$ ). This indicates that there are statistically significant differences between the control group's marks compared to the experimental group's marks.

This revealed that there were statistically significant differences at ( $\alpha \leq 0.05$ ) for using the Six Thinking Hats strategy to improve creative thinking among eighth graders at UNRWA schools in Jericho is attributed to the teaching method.

To find the source of the differences between the control and experimental groups, adjusted mean scores and dimensional standard errors of the teaching method variable were calculated, as in the following table:

**Table (4.6): Adjusted mean scores and dimensional standard errors of using the Six Thinking Hats Strategy to improve creative thinking, according to the teaching method**

<b>Area</b>	<b>Method</b>	<b>Mean</b>	<b>Std. Error</b>
<b>Fluency</b>	Control group	8.061	0.390
	Experimental group	18.207	0.390
<b>Flexibility</b>	Control group	8.072	0.391
	Experimental group	16.318	0.391
<b>Authenticity</b>	Control group	1.418	0.320
	Experimental group	5.070	0.320
<b>Total</b>	Control group	5.770	0.297
	Experimental group	13.278	0.297

As shown in table (4.6), the average score of the control group studied in the traditional way is (5.770), which is lower than the average of the experimental group (13.278), which indicates that the differences between the two groups were in favor of the experimental group as well as for domains.

#### **4.3 Summary:**

1. There is statistically significant difference in the effectiveness of using the Six Thinking Hats strategy in improving the reading comprehension skills of 8th graders at UNRWA schools in Jericho due to the teaching method and in favor of the experimental group.
2. There is statistically significant difference in the effectiveness of using the Six Thinking Hats strategy in developing creative thinking among eighth graders at UNRWA schools in the Jericho due to the teaching method and in favor of the experimental group.

## **Chapter Five**

### **Discussion, Conclusion and Recommendations**

#### **5.1 Introduction**

#### **5.2 Discussion of the Results**

##### **5.2.1 Discussion of the first question's results**

##### **5.2.2 Discussion of the first question's results**

#### **5.3 Discussion of the Hypotheses**

##### **5.3.1 Discussion of the First Hypothesis**

##### **5.3.2 Discussion of the Second Hypothesis**

#### **5.4 Suggestions**

#### **5.5 Conclusion**

#### **5.6 Recommendations**

## **Chapter Five: Discussion, Conclusion and Recommendations**

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### **5.1 Introduction**

This chapter presents the discussion of the findings of the study presented in chapter four, which aims to investigate the effectiveness of using the Six Thinking Hats strategy to improve reading comprehension skills and develop creative thinking among eighth graders at UNRWA schools in the Jericho.

### **5.2 Discussion of the results:**

#### **5.2.1 Discussion of the first question:**

- 1- Is there a significant impact of using the Six Thinking Hats strategy in the development of reading comprehension skills among 8<sup>th</sup> graders due to teaching method?

The results didn't support the null hypothesis, which indicated that there were statistical differences at ( $\alpha \leq 0.05$ ) in the mean scores of students' marks in the reading comprehension skills test between the control and experimental samples due to the teaching method. This indicates the superiority of the experimental group students who were taught according to the six thinking hats strategy over the control group students who studied according to the traditional method in the reading comprehension.

This result is consistent with the findings of the previous study as (Ababneh, 2015) which indicated the effectiveness of this strategy in developing reading comprehension at the deductive level of students. However, it is not consistent with the findings of the study of (Hightower, 2019) which indicated that there was no statistically significant difference in using the Six Thinking Hats with SLD students.

According to this, the new strategy "the six thinking hats strategy" is indicated as a strategy of teaching supports the learning process, so teachers may adopt it with their

students in their classes. The six thinking hats strategy have many positive effects on students; it helped them to:

- 1- Think without barriers or fear to encourage parallel thinking.
- 2- Direct their thinking towards specific ideas.
- 3- Separate the echo and the performance.

### **5.2.2 Discussion of the second question:**

1-Is there a significant impact of using the Six Thinking Hats strategy in the development of creative thinking skills among 8<sup>th</sup> graders due to teaching method?

Results of the second question reported in table (4.4) indicate that there are statistical differences in the mean scores of students' marks in the creative thinking test between the control and experimental samples due to the teaching method. This indicates the superiority of the experimental group students who were taught according to the six thinking hats strategy over the control group students who studied according to the traditional method in the creative thinking.

This result is consistent with the findings of the previous studies of Arab and foreign as (Ziadat & Al Ziyadat, 2016) and (Barhoom, 2013).

This would be attributed to the nature of this strategy as it is in line with the recent trends in teaching to focus on student involvement in the educational process. It provides an opportunity for the student to express opinions, put forward ideas, defend them, and critique others'. In addition, it may be attributed to the characteristics of this strategy, as it allows students to get used to flexibility in thinking without restrictions, and shifts from one pattern to another, diversifies his thinking patterns between neutrality, emotional, positive, negative, creativity and inclusiveness.

### **5.3 Discussion of the Hypothesis:**

#### **5.3.1 Discussion of the first hypothesis:**

There is no statistically significant difference at the level of ( $\alpha \geq 0.05$ ) between the mean score of the degree of using the six thinking hats on the reading comprehension skills and improving creative thinking due to teaching method.

The result reveals that the value of (F) calculated for the total marks of the difference between the mean scores of both control groups (studied in the traditional method) and the experimental group (studied using The Six Thinking Hats Strategy), in the reading comprehension skills' test according to the teaching method for the total marks is (34.296), and that Sig is (0.000) which is lower than the significance level ( $\alpha \leq 0.05$ ). This indicates that there are statistically significant differences between the control group's marks compared to the experimental group's marks, so the null hypothesis is not accepted.

This revealed that there were statistically significant differences at ( $\alpha \leq 0.05$ ) for using the Six Thinking Hats strategy to improve reading comprehension skills among eighth graders at UNRWA schools in Jericho is attributed to the teaching method.

In addition, the average score of the control group studied in the traditional way is (1.146), which is lower than the average of the experimental group (1.660), which indicates that the differences between the two groups were in favor of the experimental group.

#### **5.3.2 Discussion of the second hypothesis:**

There is no statistically significant difference at the level of ( $\alpha \geq 0.05$ ) between the mean score of the degree of using the six thinking hats on the creative thinking skills due to teaching method.

The result reveals that the value of (F) calculated for the total marks of the difference between the mean scores of both control groups (studied in the traditional method) and the experimental group (studied using The Six Thinking Hats Strategy), in the creative

thinking skills' test according to the teaching method for the total marks is (296.815), and that Sig is (0.000) which is lower than the significance level ( $\alpha \leq 0.05$ ). This indicates that there are statistically significant differences between the control group's marks compared to the experimental group's marks. This revealed that there were statistically significant differences at ( $\alpha \leq 0.05$ ) for using the Six Thinking Hats strategy to improve creative thinking among eighth graders at UNRWA schools in Jericho is attributed to the teaching method.

In addition, the average score of the control group studied in the traditional way is (5.770), which is lower than the average of the experimental group (13.278), which indicates that the differences between the two groups were in favor of the experimental group as well as for domains.

#### **5.4 Suggestions:**

In light of the goals of the current study and its findings, it is suggested to conduct more research and studies in the following fields:

- 1- Carrying out other studies similar to the current study on curriculum of other subjects such as science, mathematics and the Arabic language
- 2- Study the effect of using the Six Thinking Hats strategy on developing other types of scientific thinking
- 3- The effectiveness of the Six Thinking Hats strategy in developing thinking and reading comprehension and comparing it with other strategies.

#### **5.5 Conclusion:**

Through this chapter, there was significant difference among the students' improvement in the reading comprehension skills due to the teaching method, in favor of the experimental group. In addition, there was significant difference in the students' development in creative

thinking skills due to the teaching method, in favor of the experimental group. The six thinking hats strategy improved certain reading proficiency and creative thinking components, so it would be a good technique to be used in classes and it may help to solve some problems that students encounter during the teaching-learning process.

## **5.6 Recommendations**

In line with the findings of this study, the Six Thinking Hats strategy is clearly outperforms the traditional way in developing reading comprehension skills and creative thinking. To achieve what modern education calls for using new methods and strategies in teaching, the researcher recommends:

1. There is a need to focus on preparing activities and exercises that depends on the six thinking hats strategy to enable students to comprehend and think creatively, and not to be limited to exercises and activities that focus on information and knowledge.
2. Must include the six thinking hats strategy in the teacher's manual to its importance in improving reading comprehension and creative thinking for students.
3. Enrich the academic environment with activities and increase the use of modern programs and strategies in teaching.
4. Make education meaningful to the learner taking into account their needs and interests by providing content consistent with the problems they face.
5. Work on holding special training courses and workshops for teachers to apply the six thinking hats strategy.

## References

- Akpan, J. P., & Beard, L. A. (2016). **Using Constructivist Teaching Strategies to Enhance Academic Outcomes of Students with Special Needs.** *Universal Journal of Educational Research*, 4(2), 392-398.
- Awad, A. (2013). *The Reading Difficulties in English and How to Deal with them as Perceived by Teachers and Students in Nablus District (Doctoral dissertation).*
- Best, R. M., Floyd, R. G., & McNamara, D. S. (2008). **Taxonomy of educational objectives. Handbook 1: Cognitive domain.** *Reading Psychology*, 29(2), 137-164.
- Brantmeier, C. (2002). **Second language reading strategy research at the secondary and university levels: Variations, disparities, and generalizability.** *The Reading Matrix*, 2(3).
- Bross, T. J. (1981). **A STUDY OF THE RELATIONSHIP OF SELF-CONCEPT, CREATIVE THINKING ABILITIES, AND ACADEMIC ACHIEVEMENT.**
- Brown, A. L. (1990). **Strategies for Developing Reading Skills.** Retrieved Oct 5th, 2017 from the World Wide Web at: <http://www.nclrc.org/essentials/reading/stratread.htm>
- Brown, H. D. (2000). **Principles of language learning and teaching.**
- Carrell, P. L. (1998). **Can reading strategies be successfully taught?.** *Australian Review of Applied Linguistics*, 21(1), 1-20.
- De Bono, E. (1993). *Serious Creativity: Using the Power of Internal Thinking To Create New Ideas.* New York: Harper Collins.
- De Bono, E. (2004). **Edward De Bono's Thinking Course.** *Mica Management Resources, Great Britain*, 54.
- Dewaele, J. M., & Al-Saraj, T. M. (2013). **Foreign Language Anxiety: Some conceptual and methodological issues.** *Journal of Psychology*, 68(3), 71-78.
- Dhanapal, S., & Ling, K. T. W. (1999). **A Study to investigate how six thinking hats enhance the learning of environmental studies.** *Knowledge acquisition*, 41.
- Goel, S. (2012). **Book Review: Six thinking hats.**
- Guessing, H. J., & Karlsen, B. (2012). **A longitudinal study of dyslexia: Bergen's multivariate study of children's learning disabilities.** Springer Science & Business Media.

Hightower, A. R. (2019). **Implementing Edward de Bono's Six Thinking Hats Intervention for Improving Reading Comprehension Skills for Students With Learning Disabilities (SLD).**

Huitt, W. (2011). **Motivation to learn: An overview. Educational Psychology Interactive.** Valdosta, GA: Valdosta State University. Retrieved from <http://www.edpsycinteractive.org/topics/motivation/motivate.html>

Kavaliauskienė, G. (2009). **Proficiency in reading, writing and translation skills: ESP aspect.** *Vertimo studijos*, 2(2), 171-184.

Kenny, L. J. (2003). **Using Edward de Bono's six hats game to aid critical thinking and reflection in palliative care.** *International Journal of Palliative Nursing*, 9(3), 105-112.

Kivunja, C. (2015). **Using de bono's six thinking hats model to teach critical thinking and problem solving skills essential for success in the 21st century economy.** *Creative Education*, 6(03), 380.

Levine, A., Ferenz, O., & Reves, T. (2000). **EFL academic reading and modern technology: How can we turn our students into independent critical readers.** *TESL-EJ*, 4(4), 1-9.

Oxford, R. (1990). **Language learning strategies.** New York, 3.

Poorahmadi, M. (2012). **Investigating the efficiency of task-based instruction in improving reading comprehension ability.**

Pressley, M., Afflerbach, P., 1995. **Verbal Protocols of Reading: The Nature of Constructively Responsive Reading.** Erlbaum, Hillsdale, NJ

Rodrigues ,C. and Soriano E ( 1983 ) .: **“A study of the creativity thought of middle school students “ Arquivos Brasileiros de psychhogia . Vol . 135 No i.**

Šafranĵ, J. (2013). **Strategies of learning English as a foreign language at Faculty of Technical Sciences.** *Procedia-Social and Behavioral Sciences*, 93, 775-782.

Singhal, M. (2001). **Reading proficiency, reading strategies, metacognitive awareness and L2 readers.** *The Reading Matrix*, 1(1).

Souriyavongsa, T., Rany, S., Abidin, M. J. Z., & Mei, L. L. (2013). **Factors causes students low English language learning: A case study in the National University of Laos.** *International Journal of English Language Education*, 1(1), 179-192.

Stern, P. C. (1992). **Psychological dimensions of global environmental change.** *Annual review of psychology*, 43(1), 269-302.

Torrance, P. E. (2008). **Torrance tests of creative thinking: Interpretive manual.** Bensenville, IL: Scholastic testing Services.

Tovani, C. (2000). **I read it, but I don't get it: Comprehension strategies for adolescent readers.** Stenhouse Publishers.

Ziadat, A. H., & Al Ziyadat, M. T. (2016). **The Effectiveness of Training Program Based on the Six Hats Model in Developing Creative Thinking Skills and Academic Achievements in the Arabic Language Course for Gifted and Talented Jordanian Students.** *International Education Studies*, 9(6), 150-157.

## المراجع باللغة العربية

برهوم & خميس جمعة. (2013). أثر استخدام استراتيجيات قبعات التفكير الست في تنمية مهارات التفكير الإبداعي واتخاذ القرار بالتكنولوجيا لدى طلبة الصف العاشر الأساسي. أثر استخدام استراتيجيات قبعات التفكير الست في تنمية مهارات التفكير الإبداعي واتخاذ القرار بالتكنولوجيا لدى طلبة الصف العاشر الأساسي.

زيدان، عفيف & جبرسي، مجدي. (2015). دراسة مستعرضة لنمو مهارات عمليات العلم لدى طلبة التربية التكنولوجية في جامعة فلسطين التقنية . *Journal of Al-Quds Open University for Educational and Psychological Research and Studies*, 336(2329), 1-26.

عبابنة، إيمان عبد الفتاح. (2015). أثر إستراتيجية قبعات التفكير الست في تنمية الاستيعاب القراني بالمستوى الاستنتاجي لدى طلبة الصف الرابع الأساسي في لواء بني كنانة = *Effect of Six Thinking Hats Strategy in Development of Inferential Reading Comprehension for Fourth Grade Students in Bani Kennana District. Dirasat: Educational Sciences*, 162(2438), 1-25.

[http://jalt-publications.org/old\\_tlt/files/98/mar/carrell.html](http://jalt-publications.org/old_tlt/files/98/mar/carrell.html)

<https://youtu.be/QJmoq1R3KVc>

<https://www.slideshare.net/nathanr07/6-thinking-hats>

<https://youtu.be/pTzHAKLzgb4>

<http://www.readingmatarix.com/articles/singhal/>

<http://home.iitk.ac.in/~sahus/se367/project/TTCT.pdf>

<https://www.erasmuspluscourses.com/product/six-thinking-hats-in-schools/>

<http://ilearntechnology.com/wordpress/?p=3020>

## Appendices

### Appendix (1) Arbitrators list

<b>Name</b>	<b>Work place and</b>	<b>Specialization</b>
Dr. Hassn Hamad	AL- Quds University	Teaching Methods
Dr. Jammal Nafi'	AL- Quds University	Teaching Methods
Dr. Mohammad Thawabteh	AL- Quds University	Teaching Methods
Dr. Saida Affoneh	Al Najah University	Educational Administration
Dr. Suad Al Abed	AL- Quds University	Teaching Methods
MA. Lana Muaket	Educational Supervisor	Teaching Methods
MA. Hisham Abu qutaish	Alquds Open University	Teaching Methods

## Appendix (2) Reading comprehension test

Dear students: You are going to read a text, then answer the questions below.

*Name:*                    *Reading Comprehension Test*                    *Points: (20)*  
*Time: (45 m)*                    *Date:*

---

***Read the following passage then answer the questions below:***

Fish and many other kinds of life, like coral, are disappearing from the oceans fast. There are sad changes everywhere. Near the coast, they are often caused by pollution. Farther out, the cause is often over-fishing. Fishing boats with huge nets catch and kill everything. We risk a terrible manmade disaster – the death of the oceans.

But could our recent action to save the whales give us hope? Two centuries ago, whales were already being caught for their oil and meat. By the 1940s, the job was being made easier by modern technology. From the 1950s to the 1980s, ***they*** were being caught everywhere and numbers were collapsing. Whole species of whales were quickly being destroyed, and they were not being protected anywhere.

Finally, the world took action. In 1985, almost every country agreed to stop catching whales. This means that whale populations are slowly rising again.

Could the same thing happen with fish and fishing? Sadly, almost certainly not. In Europe, people are required to catch smaller quantities now, but almost everywhere else they go on fishing freely\_ though it is getting harder. They cannot stop: too many hungry people need to eat.

Perhaps the only way to save the oceans is the one that our ancestors discovered long ago: farming. There are already many fish farms, and perhaps there will soon be many more along the world's coasts.

***Q1: Answer the following questions: (4 points)***

1- What do you think will happen if we keep overfishing in the oceans?

---

2- How much trouble are we in?

---

3- Is there anything I can do to protect life in oceans?

---

4- If you love eating fish, and their prices are very expensive, how would you feel about that?

---

**Q2: Read and complete the notes: (8 points)**

1. Two big causes of damage to sea life are: 1 \_\_\_\_\_ 2 \_\_\_\_\_  
\_\_\_\_\_
2. Whales were caught for their: 1 \_\_\_\_\_ 2 \_\_\_\_\_
3. The worst time for whales was:  
\_\_\_\_\_
4. In 1985, most governments agreed:  
\_\_\_\_\_
5. Fishermen in Europe now have to:  
\_\_\_\_\_

The underlined pronoun *they* refers to.....

The best title for the passage is .....

**Q3: find the meaning and the opposites from the passage: (5 points)**

Word	Opposite
Falling	
Quickly	
Life	
Appear	
Worse	

Word	Meaning
Types	
Large	
Grand parents	
Hundreds of years	
Increasing	

**Q4 : Put True or False (3points)**

- 1- Many kinds of life are disappearing from ocean because of pollution ( )
- 2- The death of ocean is a natural disaster ( )
- 3- The fish farms are more tasty than wild fish ( )

**Good Luck**

**Teacher: Tamara Masri**

### Appendix (3) Torrance Tests of Creative Thinking— Figural and Verbal

Directions: Do not begin until you are told to do so.

- ❖ Try to think of things that no one else will think of.
- ❖ Try to think of as many ideas as possible.
- ❖ Add details to your ideas to make them complete.
- ❖ If you finish before time is up, you may continue to add details or sit quietly.
- ❖ Please do not go to the next activity until told to do so.

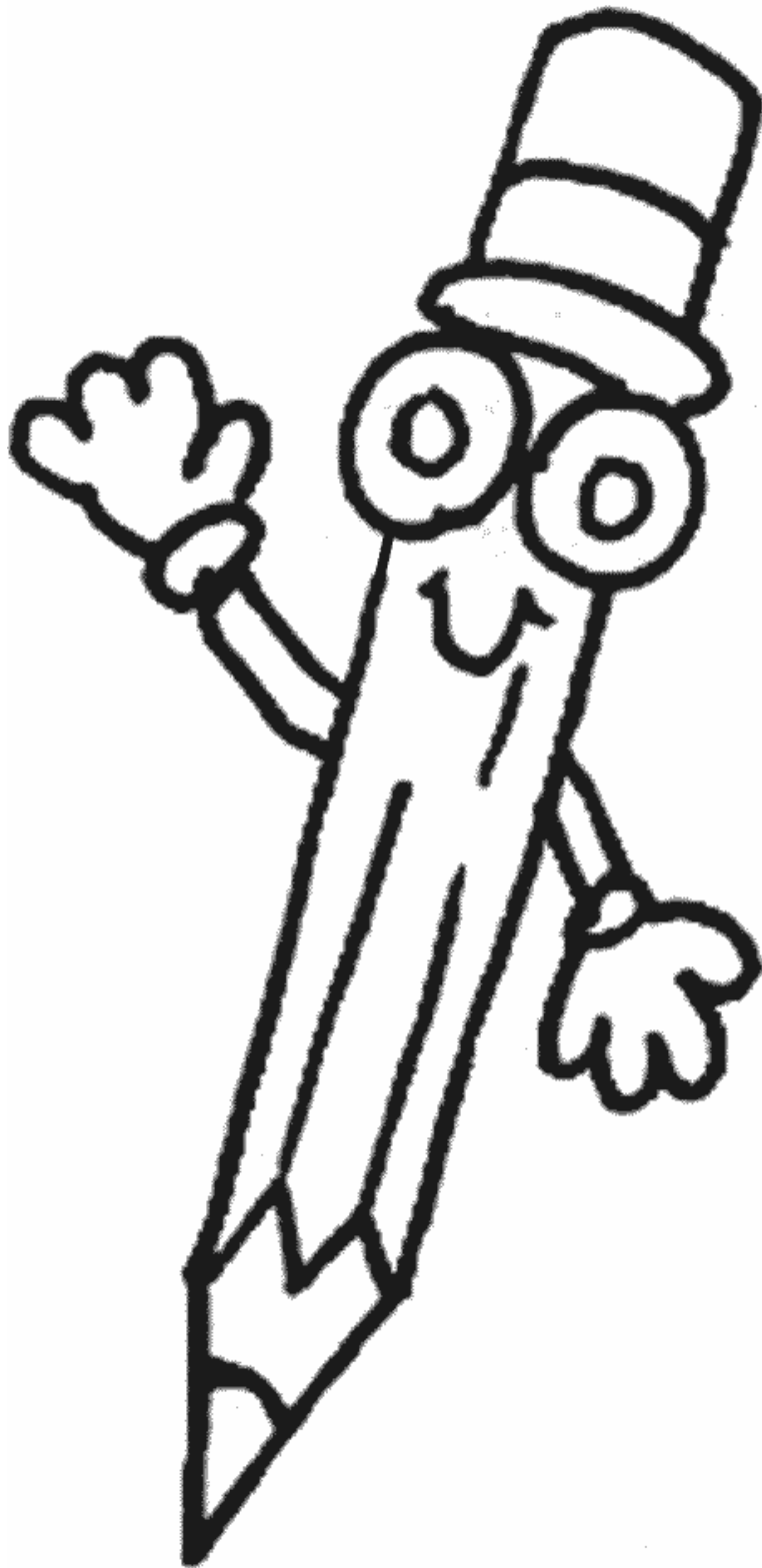
**Activity 1:** Try to improve this stuffed toy rabbit so that it will be more fun to play with. You have 3 minutes.

**Activity 2:** Just suppose that you are a magician. What might be some things that would

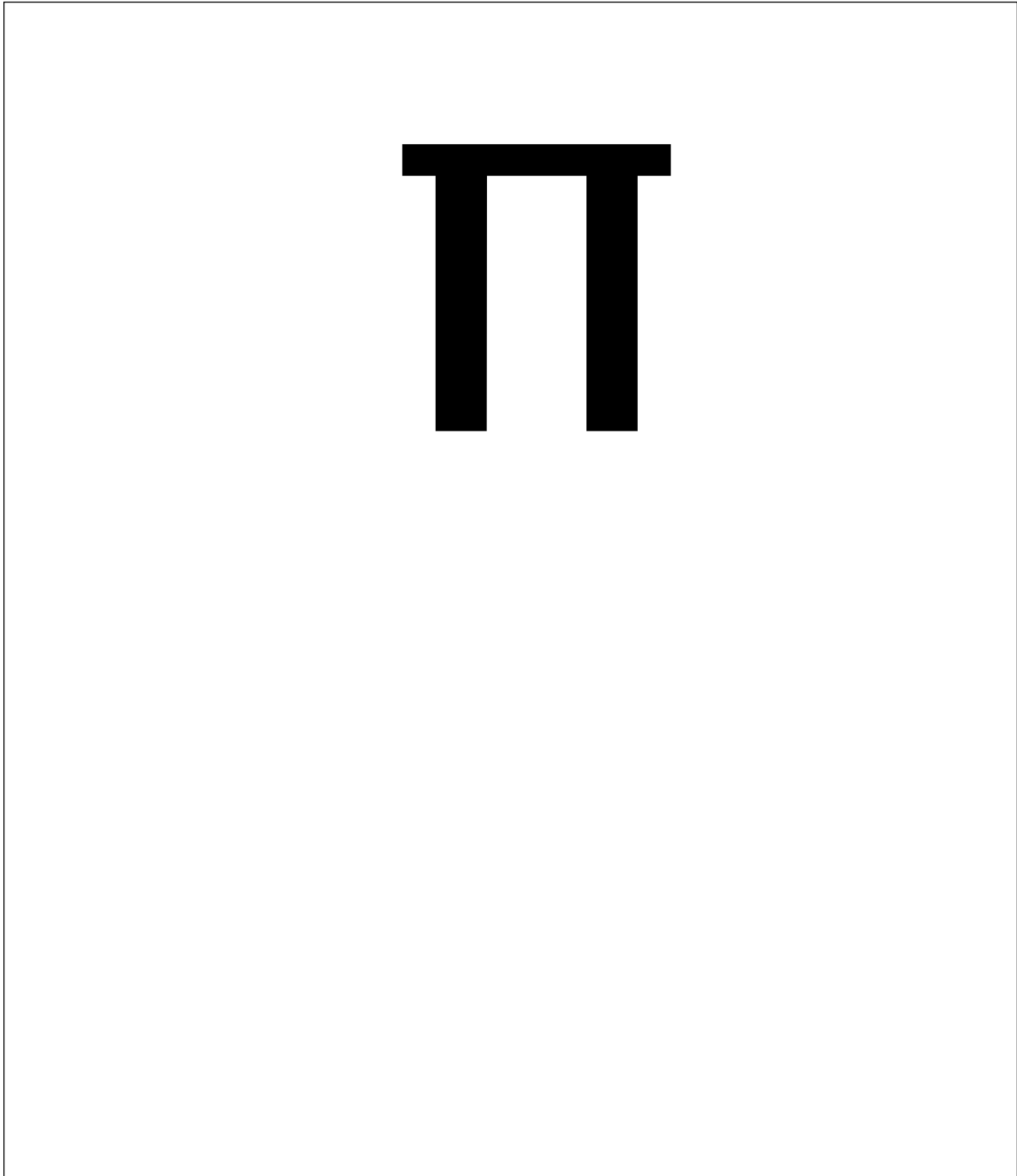


happen as a result? You have 3 minutes

**Activity 3:** What is the maximum number of unusual uses of your pencil? You have 3 minutes



**Activity 4:** Add lines to the incomplete figures below to make pictures out of them. Try to tell complete stories with your pictures. Give your pictures titles. You have 3 minutes.



**Activity 5:** Add details to the shapes below to make pictures out of them. Make the diamond a part of any picture you make. Try to think of pictures no one else will think of. Add details to tell complete stories with your pictures. Give your pictures titles. You have 3 minutes.



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Name: \_\_\_\_\_

Class: \_\_\_\_\_

Gender: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

You have done your

Test, Best of luck.

## Appendix (4) Determining Comprehension of Readers

Name:

Date:

	Limited	Satisfactory	Thorough
<p>Is always making sense of the text as opposed to simply decoding words. Meaningful reading instead of word by word reading.</p> <p>Understands the goal for reading and taps into the prior knowledge needed. Makes connections, predictions and or draws inferences in reading passages.</p> <p>Understands the important information in reading passages.</p> <p>Self corrects, re-reads when necessary to enhance understanding.</p> <p>Stops periodically to ensure understanding or uses some reflective thought.</p> <p>Reads for enjoyment or to discover something.</p> <p>Demonstrates a positive attitude toward reading. A weaker reader isn't persistent and will often require a great deal of prompting.</p>			

## Appendix (5) Teacher's Guidebook

<i>Teacher's Name: Tamara Masri</i>	<i>Subject/Course: English</i>
<i>Lesson Title: Hello World</i>	<i>Grade Level: 8<sup>th</sup> grade</i>
<i>Approximate Time Frame: 10 lessons</i>	
<i>Essential Vocabulary:</i> channel    documentary    forecast    hurricane    information like (= such as)    nationality    serious    speed	

### *Brief Overview (Summary) of the lesson:*

This lesson focuses on stimulating students' ability to ask and answer questions, and comprehend the given text through using the *Six Thinking Hats Strategy*.

### *Desired Results*

- 1- understand the general meaning, main ideas and supporting details in the text and use this knowledge to comprehend the text .
- 2- identify the features of a text and use this knowledge in similar context.
- 3- draw inferences in order to identify the points of view in a text, distinguishing fact from opinion.

### *Students will understand that:*

- 1- building vocabulary increases one's ability to read, write and communicate effectively.
- 2- asking and answering questions are processes to strengthen ideas and clarify perceptions.

### *Essential Questions:*

- 1- how does building vocabulary enhance the ability to read, write and communicate effectively?
- 2- How might the context help me understand words I do not know?
- 3- In learning any language, why isn't a dictionary enough?
- 4- How do you become a good reader?

### *students will know:*

- 1- The importance of modern communications.
- 2- Benefits of using the Six Thinking Hats strategy.
- 3- Effective ways to give opinions in difficult situations.
- 4- **Key terms**\_\_ *channel*                      *documentary*                      *forecast*                      *hurricane*  
*information like (= such as)*                      *nationality*                      *serious*                      *speed*

***Students will be able to:***

- 1- use the Six Thinking Hats strategy to comprehend a text.
- 2- generate ideas about a text using the Six Thinking Hats strategy.
- 3- ask and answer questions using different points of views.

***Assessment Evidence***

**What evidence will show that students understand?**

- **Classroom Observation:** by watching students as they read, write, collaborate, and participate in class and by choose guiding questions to move beyond simply being aware of whether students are “on task” to paying attention to how they are accomplishing the task.
- **Worksheets:** students will be provided with a reorder sentences, complete and write worksheets, listening and writing down what they hear and watching video about the Six Thinking Hats strategy.
- **Quizzes and Tests:** A multiply choice quiz will be submitted to students to check their understanding. At the end of the lesson there will be a test to measure students' over whole understanding and comprehension.
- **A questionnaire:** students will answer the questions provided in the questionnaire to be sure that they have understand and comprehend the text.

## Appendix (6): Lesson Plans

<i>Unit Title</i>	<i>Hello World</i>
<i>Grade Level</i>	<i>Eighth Grade</i>

No.	Title of the lesson	Overview of Lesson Brief summarization of the lesson: 1-2 sentences
1	<i>The Six Thinking Hats strategy</i>  <i>An introduction</i>	<ul style="list-style-type: none"> <li>- Students are supposed to get familiar with the use of the six thinking hats strategy after watching a video.  <a href="https://youtu.be/QJmoq1R3KVc">https://youtu.be/QJmoq1R3KVc</a></li> <li>- Students are going to discuss and answer questions from different points of view after watching a power point presentation. <a href="https://www.slideshare.net/nathanr07/6-thinking-hats">https://www.slideshare.net/nathanr07/6-thinking-hats</a></li> <li>- At the end of the lesson: Students will be given a worksheet to evaluate their understanding.</li> </ul>
2	<i>My bike</i>	<ul style="list-style-type: none"> <li>- Students are going to watch a video about the benefits of using the six thinking hats strategy in reading comprehension. <a href="https://youtu.be/pTzHAKLzgb4">https://youtu.be/pTzHAKLzgb4</a></li> <li>- Teacher gives students a <b>work sheet to answer about a topic using the six hats.</b></li> <li>- Students are going to practice asking and answering questions using appropriate language and structure by presenting each hat for 15 minutes.</li> </ul>
3	<i>Computers are essential for good education</i>	<ul style="list-style-type: none"> <li>- Students are supposed to practice and use the knowledge they have get about using the six hat strategy in solving problems by using sticky notes on a given poster.</li> <li>- Students will evaluate their work using the questionnaire given.</li> </ul>
4	<i>Hello World</i>	<ul style="list-style-type: none"> <li>- Students will consider the issue from the point of view of a TV presenter. They will brainstorm and discuss the issue using the six-thinking hats method.</li> <li>- Students will be given a worksheet to write their key issue statements or questions.</li> </ul>

5	<i>Living with modern communications</i>	<ul style="list-style-type: none"> <li>- Students are supposed to read the text and complete the table about the four people.</li> <li>- Students are going to discuss and answer questions from different points of view by using the six thinking hats strategy.</li> <li>- At the end of the lesson: Students will be given a worksheet to evaluate their understanding.</li> </ul>
6		<ul style="list-style-type: none"> <li>- Students are going to read the text again then find information to answer the questions.</li> <li>- Teacher gives students a work sheet to answer about a topic using the six hats.</li> <li>- Students are going to practice asking and answering questions using appropriate language and structure by presenting each hat for 15 minutes.</li> </ul>
7		<ul style="list-style-type: none"> <li>- Students are supposed to practice and use the knowledge they have got about using the six hat strategy in solving problems by using sticky notes on a given poster.</li> <li>- Students will evaluate their work using the questionnaire given.</li> </ul>
8		<ul style="list-style-type: none"> <li>- Students are going to work in pairs. Discuss good and bad things about a) television, and b) mobile phones.</li> <li>- Students will be given a worksheet to write their key issue statements or questions.</li> </ul>
9	<i>Living abroad</i>	<ul style="list-style-type: none"> <li>- Students are going to reorder the sentences to make a good paragraph, and then write it on their text book.</li> <li>- Students are going to collect information about Sami and Nadia Kamal, talk about some difficulties they have faced when living in a foreign country.</li> <li>- Teacher gives students colored hats and organizes the process.</li> <li>- Teacher ask students to wear a suitable thinking hat to talk about Sami and Nadia, the good and the bad things about living away from home, and how they towards that.</li> </ul>

10	<i>Contacting a new pen friend.</i>	<ul style="list-style-type: none"><li>- Show the students the two people in the pictures. Ask questions about them, for example: How old is Jack? Where is Jo from? How many sisters has Jack got? What does Jo like? What is Jack learning?</li><li>- Ask the students to choose a pen friend for themselves – Jack or Jo.</li><li>- Show the students the outline email. Explain that it is an email from their pen friend.</li><li>- Show the students how to start filling in the email with information about Jack or Jo.</li><li>- The students write the email from their pen friend.</li><li>- Call students up to the front to write their emails on the board.</li><li>- Students are going to stick suitable colored hats on the email, (not all hats are needed)</li></ul>
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## Appendix (7): Lessons Activities

### Lesson 1 (Activity 1)

- In this activity, students are going to understand and use each of the Six Thinking Hats.
- Participants will work in small groups to identify and write down what each hat represents.
- This activity will take 15 minutes.

<i>Name:</i>	<i>Worksheet (1)</i>	<i>8<sup>th</sup> grade ( )</i>
<b>Write down what each hat represents:</b>		
 <u>White hat:</u>		
 <u>Yellow hat:</u>		
 <u>Black hat:</u>		
 <u>Red hat:</u>		
 <u>Green hat:</u>		
 <u>Blue hat:</u>		
<i>Good Luck</i>		



## **Lesson 3 (Activity 3)**

In this activity, students are going to practice using the six thinking hats to solve a problem.

### **Preparation**

1. Arrange the class to allow for conversation in 3 groups of 4 participants.
2. Write down and describe the characteristics/opinions of each colored hat in detail and post clearly visible reminders in the working space.

### **Execution**

1. Choose a student to introduce the problem and present background information on the subject matter to the other students.
2. Instruct students to start out wearing the same hat and then move on to the other ones, in an order predetermined by the teacher.
3. Assign facilitators for each group, or ask participants to select their own facilitator. The role of facilitator is to guide a productive discussion.
4. Move between groups to ensure that students remain disciplined in their assigned perspectives and that the conversations are progressing according to the learning objectives.
5. Following all their explorations under each colored hat, instruct the groups to collaboratively evaluate the outcomes of their process and establish action items to solidify the lessons learned.
6. Ask each group to write their answers on the sticky notes, then stick them on the poster.
7. Summarize the results and communicate them for future reference if appropriate.

### **Tools list**

- poster of role descriptions (six hats)
- sticky notes

## **Scenario 1:**

### ***Computers are essential for good education.***

Computer is the wonderful and mastermind gift of the science to the whole human fraternity. It can be used to do any kind of works. It is very easy to handle by anyone and takes very less time to learn. Because of its easiness and high work efficiency, it is being used in many fields like offices, banks, hotels, educational institutions, shops, hospitals, commercial places, schools, colleges, training institutes, military establishments, military, industries, etc. Many people buy laptop or desktop for their kids to learn about required things in their schools or playing computerized video-games, etc.

Computer is a big dictionary and large storage device which we use to save any type of large amount of data like information, study materials, projects, photos, images, video, audio, songs, clips, games, and many more. It is an electronic machine which is able to calculate and solve big problems. It helps in enhancing our skill level and get information easily. It is very simple data based machine. It provides facility of many other tools like paint tool, text tool, etc which are very beneficial for the kids, children and students to use it more effectively.

We can use it for any big or small mathematical calculations very accurately. It is used to forecast the information about weather, in printing books, news papers, diagnosing diseases, etc. It is used to make online railway reservations, ticket booking, hotel or restaurant booking from any place all over the world.



- ***Apply different hat thinking to this suggestion.***
- ***Don't worry if you agree or disagree with the statement***

COLOURED HAT	THINK OF	DETAILED DESCRIPTION
	<i>White paper</i>	The white hat is about data and information. It is used to record information that is currently available and to identify further information that may be needed.
	<i>Fire and warmth</i>	The red hat is associated with feelings, intuition, and emotion. The red hat allows people to put forward feelings without justification or prejudice.
	<i>Sunshine</i>	The yellow hat is for a positive view of things. It looks for benefits in a situation. This hat encourages a positive view even in people who are always critical.
	<i>A stern judge</i>	The black hat relates to caution. It is used for critical judgement. Sometimes it is easy to overuse the black hat.
	<i>Vegetation and rich growth</i>	The green hat is for creative thinking and generating new ideas. This is your creative thinking cap.
	<i>The sky and overview</i>	The blue hat is about process control. It is used for thinking about thinking. The blue hat asks for summaries, conclusions and decisions.

## **Lesson 4 (Activity 4)**

### ***Activity 4: Hello World***

#### ***Background information***

##### ***Living with modern communications***

*Welcome to Young World, and this week we're asking people of different nationalities, 'How are modern communications changing our lives?'*

**\*\* In this activity, students will consider this issue from the point of view of a TV presenter. They will brainstorm and discuss the issue using the six-thinking hats method (developed by Dr Edward de Bono).**

- ***What I need:***

Photocopies of Worksheet: *Six thinking hats*. It can be enlarge them to A3 size, so students have more space to write.

- ***What to do:***

1. *Begin the session by posing the following scenario:*

*'There are lots of bad TV programmes, but the weather forecasts are good. We get bad hurricanes here in America, and they're getting worse. But modern satellites are collecting better information on their speed and direction, and forecasts are getting better. So we understand hurricanes better now, and we now know when and where one will arrive.'*

*'We get Palestinian TV and hundreds of other satellite channels, too. Hanan and I love watching cartoons all day! That's bad, I know. But now Mum and Dad say we can only watch serious programmes like documentaries. We think that's bad, too!'*

*'Like a lot of Moroccan people, my job is fishing, and my mobile is very important in my work. It's expensive, but I can now call different markets from my boat. That means I can find the best market for my fish and take them there. My mobile is giving my family a better life.'*

*'Australian farms are big, and our parents like to stay in contact, so they've given us mobiles. But now we're calling and texting friends more and more, and Mum and Dad are getting angry. They say we're always on the phone when they want to talk – and we shouldn't be! ... Oh, someone's calling now. Excuse me!'*

#### ***Are modern communications good or bad?***

2. *Divide the students into groups of four.*
3. *Ask the groups to write down all the information they need to make a decision.*

4. *Hand out the worksheets; explain the six-thinking-hats method and what each color represents.*
5. *Starting with the white hat, groups should spend the time indicated in Table 1, discussing and writing down notes under each hat on the worksheet. I should keep time, and encourage groups to stay focused on the particular hat.*
6. *After the students have worked through the six-hats, have each group present their findings (Blue Hat) and their reasoning to the rest of the class.*
7. *Discuss whether the thinking hats process changed their mind about the topic.*

<b>Suggested time</b>	<b>Thinking hat color</b>
10 min	White Hat:
5 min	Red Hat:
7 min	Black Hat:
7 min	Yellow Hat:
5 min	Green Hat:
5 min	Blue Hat:


**Table 1: Suggested time interval to be spent on brainstorming for each thinking hat color**

What is your key issue statement or question?

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**White hat:**

List the information, facts and figures about the issue.



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**Red hat:**

What are your opinions and feelings about the issue?



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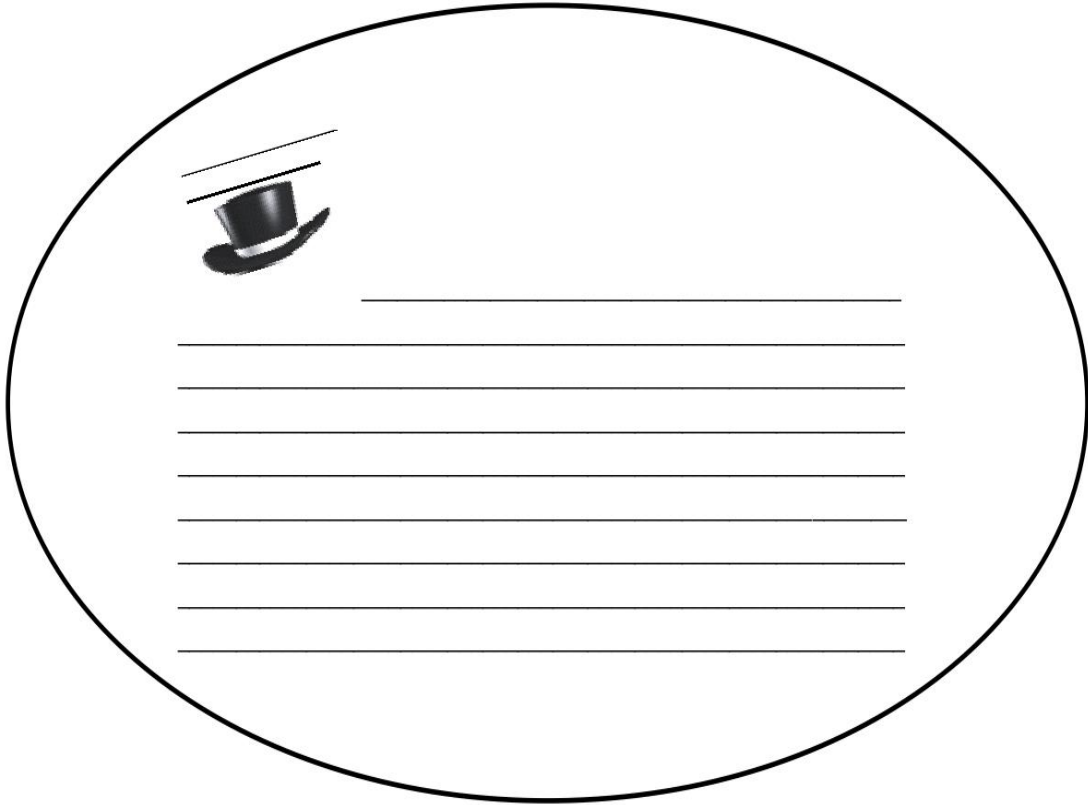
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***Black hat:***

What are your criticisms, judgments and negatives about the issue?



A large black oval frame containing a small black top hat icon in the upper left corner. Below the hat are ten horizontal lines for writing.

***Yellow hat:***

What are the positive aspects of the issue?



A yellow-bordered rectangular box with a yellow top hat icon in the upper left corner. Below the hat are ten horizontal lines for writing.



## **Lesson 5 (Activity 5)**

**B Read and complete the table.**







Name	From	Talking about	Good thing	Bad thing
Anna	America	TV	Weather forecast	Lots of bad TV programs
Sameer & Hanan				
Ali				
Lyn & Mark				

- **In this activity students are going to:**

- 1- Read the text again then complete the table.
- 2- Choose a suitable thinking hat to collect general information, good things and bad things.
- 3- Choose the green thinking hat to give alternatives.
- 4- How do you feel if you don't have internet in your life?
- 5- Use the blue hat to sum up what you have learned about modern communications.

\*\*\*\*\*

Students will be given a worksheet to evaluate their understanding.

 <ol style="list-style-type: none"><li>1. What information do we have?</li><li>2. What information is missing?</li><li>3. What do you need to know?</li></ol>	
 <ol style="list-style-type: none"><li>1. How do you feel about the topic?</li><li>2. What does your intuition</li></ol>	
 <ol style="list-style-type: none"><li>1. Is it true?</li><li>2. Does it fit?</li><li>3. Will it work?</li></ol>	
 <ol style="list-style-type: none"><li>1. What are the benefits?</li><li>2. Why should it work?</li><li>3. What is good about it?</li></ol>	
 <ol style="list-style-type: none"><li>1. How would you solve the problem?</li><li>2. Can you create other ways?</li><li>3. What other possibilities are there?</li></ol>	
 <ol style="list-style-type: none"><li>1. Where are we now in our thinking?</li><li>2. What should we do next in our thinking?</li><li>3. Summarize what has been achieved so far in the thinking.</li></ol>	

## **Lesson 6 (Activity 6)**

- **In this activity students are going to read the text again then find information to answer the questions.**

1- What is happening to hurricanes?

---

2- What is happening to weather forecasts, and why?

---

3- Which do Sameer and Hanan like – cartoons or documentaries?

---

4- What do their parents prefer?

---

5- Does Ali always take his fish to the same market?

---

6- How is his mobile giving his family a better life?

---

7- Do Lyn and Mark live in a big town?

---

8- Are they using their phones for the right thing?

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- **Teacher gives students a work sheet to answer about the topic using the six hats.**

NAME: \_\_\_\_\_

DATE: \_\_\_\_\_



**WHITE HAT**

Information/Data



**RED HAT**

Feelings/Gut Reaction



**BLACK HAT**

Negatives



**YELLOW HAT**

Positives



**GREEN HAT**

Creativity



**BLUE HAT**

Managing our Thinking


## Lesson 7 (Activity 7)

- Students are supposed to practice and use the knowledge they have get about using the six hat strategy in solving problems by using sticky notes on a given poster.
- Students will evaluate their work using the questionnaire given.



## Appendices (8): Six Thinking Hats Questionnaire

*A questionnaire about using the Six Hats strategy*



**استبيان حول استخدام إستراتيجية قبعات التفكير الست**

Statement	ارفض بشدة Strongly disagree	ارفض disagree	محايد Neutral	أوافق agree	أوافق بشدة Strongly agree	البيان
1. Does using the Six Thinking Hats program simplify and facilitate the thinking process?						1. هل استخدام برنامج قبعات التفكير الست يسهل وييسر عملية التفكير؟
2. Do you follow a specific and particular way of thinking?						2. هل تتبع طريقة معينة ومحددة للتفكير؟
3. Is the Six Thinking Hats strategy limited to solving problems?						3. هل يقتصر برنامج قبعات التفكير الست على من يواجه مشكلة ما؟
4. Do you think discussing a subject in different ways is a waste of time?						4. هل تعتقد أن مناقشة الموضوع من عدة نواحي مضيعة للوقت؟
5. Do you allow your emotions to interfere in your decisions choice?						5. هل تسمح لمشاعرك بالتدخل في اختيار قراراتك؟
6. Do you look at the negative aspects of the subject before making your decisions?						6. هل تنظر إلى سلبيات الموضوع قبل اتخاذ قراراتك؟
7. Do you agree on implementing the Six Thinking Hats strategy on all subjects?						7. هل تؤيد تطبيق إستراتيجية قبعات التفكير الست على جميع المواضيع؟
8. In your opinion, are there any disadvantages to this strategy?						8. بنظرك هل هناك سلبيات لهذه الإستراتيجية؟
9. Have you ever attended a lesson in which the Six Thinking Hats Strategy is applied?						9. هل سبق لك وان حضرت درس طبقت فيه إستراتيجية قبعات التفكير الست؟
10. Have you ever discovered a creative student because of using the Six Thinking Hats Strategy?						10. هل سبق لك وان اكتشفت طالبا مبدعا بسبب إستراتيجية قبعات التفكير الست؟

## Lesson 8 (Activity 8)

- Students are going to work in pairs. Discuss good and bad things about a) television, and b) mobile phones.
- Students will be given a worksheet to write their key issue statements or questions.

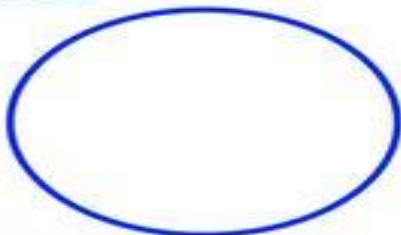


Name : \_\_\_\_\_ Date: \_\_\_\_\_

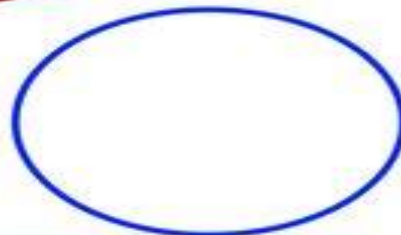
### Thinking Hat Detention Sheet



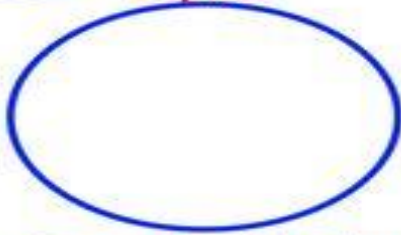
**Facts**



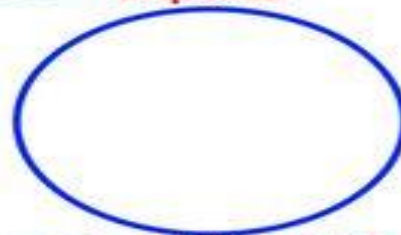
**Emotions**



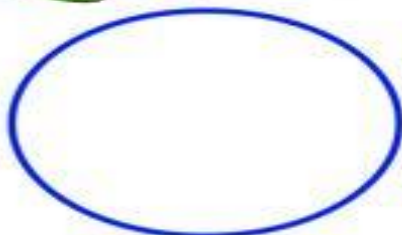
**Positive Impact**



**Negative Impacts**



**Creative impact For your Behaviour.**



**How will you behave next time?**



## **Lesson 9 (Activity 9)**

- In this activity, students are going to reorder the sentences to make a good paragraph, and then write it on their text book.
- Students are going to collect information about Sami and Nadia Kamal, talk about some difficulties they have faced when living in a foreign country.
- Teacher gives students colored hats and organizes the process.
- Teacher prepares colored hats for the students.
- Teacher asks students to wear a suitable thinking hat to talk about Sami and Nadia, the good and the bad things about living away from home, and how they towards that.

### **4 Number the sentences in the correct order 1-5.**

- They started there a year ago when they first arrived in Britain.
- He is 14 and she is 13, but they are in the same year at Westhill School.
- But they speak the language well now, and so life is much easier.
- Life there was difficult at that time because their English was not very good.
- 1 Sami and Nadia Kamal are brother and sister.

### **5 Write a paragraph about Sami and Nadia. Use the sentences in activity 4.**

Sami and Nadia Kamal are brother and sister. He ...

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## Lesson 10 (Activity 10)

- In this activity, the teacher shows the students the two people in the pictures. Ask questions about them, for example: How old is Jack? Where is Jo from? How many sisters has Jack got? What does Jo like? What is Jack learning?
- Ask the students to choose a pen friend for themselves – Jack or Jo.
- Show the students the outline email. Explain that it is an email from their pen friend.
- Show the students how to start filling in the email with information about Jack or Jo.
- The students write the email from their pen friend.
- Call students up to the front to write their emails on the board.
- Teacher prepares sticky colored hats for the students.
- Students are going to stick suitable colored hats on the email, (not all hats are needed)

### 1 Choose a pen friend and write a message. Use the information cards to help you.

Unit task: Contacting a new pen friend.

**Jack Kline**



**How old:** 13  
**School Year:** 8  
**From:** Toronto, Canada  
**Brothers:** 1 older – Tom, 16  
**Sisters:** 2 younger – Liz, 9, and Ann, 11  
**Likes:** basketball, camping  
**Learning:** play the piano – very difficult

**Jo Peel**



**How old:** 14  
**School Year:** 8  
**From:** Perth, Australia  
**Brothers:** 2 younger – Ben, 10, and Tom, 8  
**Sisters:** 1 older – Sue, 15  
**Likes:** volleyball, drawing  
**Learning:** play table tennis – good fun

Dear \_\_\_\_\_, ← your name

I'm very happy to be your new pen friend. My name is \_\_\_\_\_, and I'm from \_\_\_\_\_ in \_\_\_\_\_. I'm \_\_\_\_\_ old, and I'm in \_\_\_\_\_ at school. ← Paragraph 1 information about Jack/Jo

We're a big family. I have an older \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_'s \_\_\_\_\_ years old. \_\_\_\_\_ also have two younger \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, and \_\_\_\_\_'re \_\_\_\_\_ and \_\_\_\_\_ years old. ← Paragraph 2 information about his/her family

I like \_\_\_\_\_, and I enjoy \_\_\_\_\_, too. At the moment, I'm also learning to \_\_\_\_\_, and \_\_\_\_\_'s \_\_\_\_\_! ← Paragraph 3 information about likes and dislikes

Can you tell me about yourself? And what about \_\_\_\_\_ family? What do you like doing? Are \_\_\_\_\_ learning anything new at the moment? ← Paragraph 4 new questions

Please write back soon. ← Paragraph 5 finish

Best wishes

\_\_\_\_\_ ← his/her name

## Appendix (9) Schedule of application days

Name: Tamara Al masri		School: Aqbat Jaber	
No.	Lesson	Day & date	Notes
1.	Pre-reading comprehension test	Sunday, 13.oct.2019.	
2.	Pre-creative thinking test	Monday,14.oct.2019.	
3.	The Six Thinking Hats strategy An introduction	Tuesday,15.oct.2019.	Students didn't get the information
4.	worksheet to evaluate their understanding of the previous lesson	Wedenesday,16.oct.2019.	
5.	Revision of the previous lesson	Thursday,17.oct.2019.	
6.	My bike	Sunday,20.oct.2019.	
7.	Students practiced asking and answering questions using appropriate language and structure by presenting each hat for 15 minutes.	Monday,21.oct.2019.	
8.	Computers are essential for good education	Tuesday, 22.oct.2019.	
9.	Revision of the previous lesson	Wedenesday,23.oct.2019.	
10.	Revision & self- evaluation using the questionnaire given.	Thursday,24.oct.2019.	
11.	Hello World	Sunday,27.oct.2019.	Time was not enough to do the worksheet
12.	Students were given a worksheet to evaluate their understanding.	Monday,28.oct.2019.	
13.	Revision of the previous lesson	Tuesday,29.oct.2019.	

14.	Living with modern communications	Wednesday,30.oct.2019.	
15.	Students were given a worksheet to evaluate their understanding.	Thursday,31.oct.2019.	
16.	Revision of the previous lesson	Sunday,3.Nov.2019.	
17.	Living with modern communications	Monday,4.Nov.2019.	Time was not enough to finish the lesson
18.	Students practiced asking and answering questions using appropriate language and structure by presenting each hat for 15 minutes.	Tuesday,5. Nov.2019.	Students stick suitable colored hats on the email, (not all hats are needed)
19.	Revision of the previous lesson	Wednesday 6. Nov.2019.	
20.	Living with modern communications	Thursday,7.nov.2019.	Students didn't get the information
21.	Revision & self- evaluation using the questionnaire given.	Sunday,10. Nov.2019.	
22.	Revision of the previous lesson	Monday,11.nov.2019.	
23.	Living abroad	Tuesday,12.nov.2019.	Time was not enough to finish the lesson
24.	Revision of the previous lesson	Wednesday,13.nov.2019.	
25.	Contacting a new pen friend	Thursday,14.nov.2019.	Students didn't get the information
26.	Revision & continuing the previous lesson	Sunday,17.nov.2019.	

27.	Revision of the previous lesson	Monday,18.nov.2019.	
28.	Revision & preparing for the test	Tuesday,19.nov.2019.	
29.	Post-reading comprehension test	Wedenesday,20.nov.2019.	
30.	Post-creative thinking test	Thursday,21.nov.2019.	

## Appendix (10) Al-Quds University Permission Letter

Al-Quds University  
Faculty of Educational Sciences

جامعة القدس  
كلية العلوم التربوية

2019/9/1 التاريخ

حضرة السادة/ مديرية التربية والتعليم المحترمين  
رام الله

الموضوع : تسهيل مهمة

تحية طيبة وبعد..  
تقوم الطالبة تمارا فريد المصري ، ورقمها الجامعي (21712429) ، باجراء دراسة بعنوان:

**The impact of the Use Six Thinking Hats strategy to improve Eighth Grade students Reading Comprehension Skills and Developing creative Thinking at UNRWA**

لذا نرجو من حضرتكم تسهيل مهمة الطالبة المذكورة أعلاه، وذلك لتطبيق الدراسة خلال الفصل الدراسي الحالي .

شاكرين لكم حسن تعاونكم

أ.د. عفيف زيدان  
منسق برنامج اساليب التدريس

Approval  
بالإختصاص على  
الصحة التربوية

20002 تذاكر 02-2794913 القدس غرب