

TEACHERS' QUESTIONS: DO THEY ENCOURAGE CRITICAL THINKING?

The Institute of Educational Sciences

Anadolu University

By

NİLÜFER ÖZGÜR

In Partial Fulfillment of the Requirements for the Degree of
MASTERS OF ARTS

In

THE DEPARTMENT OF
TEACHING ENGLISH AS A FOREIGN LANGUAGE
ANADOLU UNIVERSITY
ESKİŞEHİR

April 2007

ABSTRACT
TEACHERS' QUESTIONS: DO THEY ENCOURAGE CRITICAL
THINKING?

Özgür, Nilüfer

M.A., Department of Teaching English as a Foreign Language

Supervisor: Prof. Dr. İlknur Keçik

February 2007

We can easily underline that today there are two related terms with society: knowledge and technology. Every person living in a society should always think critically in order to cope with a developing technology and knowledge. Besides analytical skills, firstly critical thinking abilities should be taught to help students in the process.

Developing individuals who posse critical thinking skills, is one of the most important goals of our education system. Teachers, instructors, and lecturers play a great role in developing critical thinking. Considering the classroom environment, teachers can do different tasks to promote this; for example, they can start a class discussion by which students can have the chance to express their personal opinions. Topics given should ideally encourage students to do research, synthesize the relevant ideas and present them in a logical way. Furthermore, teachers can act as facilitators promoting students' critical thinking abilities by asking questions which can foster students' ability to analyze, synthesize, reason, and express their ideas freely.

Paying attention to the importance of the questions in developing critical thinking skills, the aim of this study is to identify what kind of questions teachers ask at Intermediate level in Listening / Speaking courses at Anadolu University School of Foreign Languages. Moreover, the study aims to find out whether the questions asked by the teachers include High- Order questions or not.

The study was conducted in 2005- 2006 at Anadolu University School of Foreign Languages with eight teachers teaching 400 students at Intermediate level. The eight teachers were video- recorded for eight class

hours over a week period in their Listening / Speaking courses. It has to be underlined that from those eight teachers, three teachers were chosen based on their teaching experiences and their native languages and the recordings of those particular teachers were analyzed. The total process of recording lasted for three weeks between the 12th of December 2005 and 2nd of January 2006.

The findings of the study revealed that teachers ask different types of questions. Since the focus of the study was the High- Order Questions, the results indicated that the percentage of the High- Order Questions asked in Listening/Speaking classes is not high.

Key Words: Questions, High- Order Questions, Language Teaching,
Classroom Discourse

ÖZET
 ÖĞRETMEN SORULARI: ELEŞTİREL DÜŞÜNMEYE TEŞVİK
 EDİYORLAR MI?

Özgür, Nilüfer

Yüksek Lisans, Yabancı Dil Olarak İngilizce Öğretimi Bölümü

Tez Danışmanı: Prof. Dr. İlknur Keçik

Şubat 2007

Günümüz toplumu bilgi ve teknoloji toplumu olarak adlandırılabilir. Bu toplumda yer alan her bir bireyin, teknoloji ve bilgiyle baş edebilmesi için eleştirel düşünmesi ve düşüncelerini başkalarıyla paylaşması gerekir. Bu da hem bireysel hem toplumsal gelişimi sağlar. Düşünen bireyler yetiştirebilmek için eleştirel düşünme becerilerinin kazandırılması gerekir. Düşünebilen bireylerin yetiştirilmesi, eğitim sistemimizin en temel amaçları arasında yer alır. Bireylere eleştirel düşünme becerilerinin kazandırılmasında en önemli görev öğretmenlere düşmektedir. Bu nedenle sınıf içinde öğrencilerin eleştirel düşüncelerini geliştirebilmeleri için öğretmenlere çeşitli görevler düşmektedir. Örneğin, tartışma konularının açılması, öğrencilere araştırmaya yönelik ödevlerin verilmesi, bu ödevlerin sınıfta sunulması, öğrencilerin farklı bakış açıları kazanmalarını sağlayacaktır. Bunun yanında, eleştirel düşünmeyi geliştirecek sorular sorulması, öğrencilere düşüncelerinin açıklatılması, var olan düşünceleriyle yeni bilgilerin analiz ya da sentez edilmesine yol açacak sorular yöneltilmesi yoluyla da öğrencilerin eleştirel düşüncelerini geliştirebilir.

Bu araştırmanın amacı, Anadolu Üniversitesi Yabancı Diller Yüksek Okulu'nda orta seviyede eğitim veren öğretim elemanlarının Dinleme/Konuşma dersinde eleştirel düşünme gücünü geliştirmeye yönelik soruların sorulup sormadığını ve bu soruların işlevlerini saptamaktır.

Araştırma 2005- 2006 öğretim yılı bahar dönemi Anadolu Üniversitesi Yabancı Diller Yüksek Okulu'nda orta düzeyde eğitim veren sekiz öğretim elemanı ve 400 öğrenciyle gerçekleştirilmiştir. Sekiz öğretim elemanının Dinleme / Konuşma dersleri bir hafta boyunca videoya

kaydedilmiştir. Analiz için sekiz öğretim elemanından üçü öğretim tecrübeleri ve ana dilleri farkı dikkate alınarak seçilmiş ve bu öğretim elemanlarının dersleri incelenmiştir. Veriler hem niceliksel hem niteliksel olarak analiz edilmiştir.

Çalışmanın sonuçları öğretim elemanlarının değişik soru türleri sorduklarını ortaya koymuştur, ancak öğrencileri eleştirel düşünmeye yönlendirecek türde soruların çok sayıda sorulmadığı gözlenmiştir.

Anahtar Kelimeler: Sorular, Eleştirel Düşünme Soruları, Dil Öğretimi, Sınıf İçi Bilimsel Araştırma

ACKNOWLEDGEMENTS

I would like to thank my thesis advisor, Prof. Dr. İlknur Keçik, for her contributions, guidance, and patience which motivated me while writing my thesis. I was really grateful for her patience during this process.

Special thanks to Assoc. Prof. Handan Kopkallı- Yavuz, the director of Anadolu University School of Foreign Languages and Assist. Prof. Aysel Bahçe since they gave permission to conduct my study and supported my research.

I would like to express my thanks to the members of my jury for their feedback.

I would like to express my special thanks to my classmates and colleagues Havva Kurt Taşpınar, Meltem Muşlu for their support throughout the year. I thank Charles Sant, Gaye Şenbağ, and Başak Aydoğan for their assistance and patience in conducting the study.

I would like to thank my teachers teaching at ELT department and colleagues who participated in my proposal session and shared their valuable ideas to conduct this study in a more effective way.

I also owe much to my family for their continuous encouragement, patience, support and love throughout my life.

TABLE OF CONTENTS

ABSTRACT.....	v
ÖZET.....	vii
ACKNOWLEDGEMENTS.....	ix
TABLE OF CONTENTS.....	xi
LIST OF	
TABLES.....	xiii
CHAPTER I: INTRODUCTION.....	1
1.1.Introduction.....	1
1.2.Statement of the Problem.....	5
1.3.Research Questions.....	6
1.4. Definitions of the Terms.....	7
CHAPTER II: LITERATURE REVIEW.....	9
2.1.Introduction.....	9
2.2.Critical Thinking.....	10
2.3.How to Promote Critical Thinking in a Classroom Environment.....	14
2.4.Functions of “Questions”.....	16
2.5.Question Types.....	18
2.6.Studies Conducted on Critical Thinking and Questions.....	30
2.7.Conclusion.....	36

CHAPTER III:

METHODOLOGY.....	38
3.1.Introduction.....	38
3.2.Participants.....	38
3.3.Data Collection.....	41
3.4.The Book Used by the Teachers and the Chapter Studied during the Video Recording Session.....	42
3.5.Data Analysis.....	45
3.6.Conclusion.....	46
CHAPTER IV: RESULTS AND DISCUSSION.....	47
4.1.Introduction.....	47
4.2 The Questions Asked by the Teachers.....	47
4.3.Functions of High- Order Questions.....	53
4.3.1.The High-Order Questions and their Functions asked by the First Teacher.....	57
4.3.2. The High-Order Questions and their Functions asked by the Second Teacher.....	60
4.3.3. The High-Order Questions and their Functions asked by the Third Teacher.....	64
4.4.Summary.....	69

CHAPTER V:

CONCLUSION.....	70
5.1.Introduction.....	70
5.2.Summary of the Study.....	70
5.3.Conclusion.....	74
5.4.Pedagogical Implications.....	75
5.5.Further Research.....	76
REFERENCES.....	77
APPENDIXES.....	84

LIST OF TABLES

1	Background Information about the Teachers.....	40
2	The Distribution of Utterances and Questions of the Teachers.....	48
3	Types of Questions Asked by the Teachers.....	49
4	Examples of Different Question Types.....	52
5	Number of High- Order Questions Included in the Chapter.....	54
6	The Functions of the High- Order Questions Asked by the Teachers.....	67

CHAPTER I: INTRODUCTION

“The quality of our thinking is given in the quality of our questions”

Elder & Paul (2005)

1.1. Introduction

In people’s lives there are some basic needs like food, water, and shelter. Besides these, there is another important need as for a person, which is education. Although many people and politicians talk about the importance of education, there are still a lot of problems to overcome in our education system. The current system suggests students memorize a series of facts and remember those facts when they are asked to complete a test. This problem seems to have been the concern of different education systems for a long time.

Raths, Jonas, Rothstein and Wasserman in their work in 1967 (cited in Carr, 1990: p1) point out that the thinking process is not emphasized at schools. They noted that, “...memorization, drill, homework, [and the] quiet classrooms” were rewarded, while “...inquiry, reflection [and] the consideration of alternatives [were] frowned upon.” Tama (1989) also draws attention to the same problem by saying that educators complain about having students who do not think (Mullis, 1983, Gardner, 1983; Action for excellence, 1983, cited in Tama, 1989). Oliver & Utermohlen (1995, cited in Karen, 1997) state that the students of today are still passive receptors of information; however, there is too much information with the help of the developing technology, which can require students to cope with the information instead of passively accepting it.

As Cotton (1991: p.16) indicates:

“If students are to function successfully in a highly technical society, then they must be equipped with lifelong learning and thinking skills necessary to acquire and process information in an ever- changing world”.

For this reason, recently in the current education system there have been some attempts to find solutions to overcome the problem of passive students and to develop students as effective thinkers. Hirose (1992) mentions that teaching thinking skills are not only essential for students’ success in their educational life but also it is necessary for their success in the workforce. According to Hirose (1992) employers complain about employees’ lack of reasoning and critical thinking abilities. Those abilities are essential because compared with the jobs in the past the modern work environment requires more thinking and problem solving abilities. In order to be successful in life, people should think critically, and it is vital that this process be the focus of schooling in every area of the education system (Huitt, 1993; Thomas & Smoot, 1994, cited in Huitt, 1998). Regarding the importance of critical thinking, teaching that skill should be started since childhood and should be continued consciously at schools. (More detailed information on critical thinking is given in Chapter II.)

Briefly, it is urgent for the teachers to achieve the aim of developing critical thinkers in life. Considering the studies conducted on critical thinking, it was found that studies tried to find out the relationship between reading and critical thinking, writing and critical thinking. In terms of the relationship between critical thinking and language learning classrooms, developing critical

thinking abilities was not the concern of the teachers in the early methodologies. However, nowadays it is stated that knowing the mechanism and the system of the language is not enough. In other words, becoming proficient in language use does not only mean using the language, knowing the meaning of the words and the structures. It also requires students to show that they are creative and that they are critical thinkers who can state their own ideas on any topic (Kabilan, 2000).

Then the following question comes to mind: What is the role of the teachers in the classroom to promote students' critical thinking abilities?

Keng (1996) tries to answer that question by saying that when teachers want to carry out the process of critical thinking in classroom, teachers should change their roles from a traditional teacher to a nontraditional one. In other words, the teacher should not think of himself or herself as an expert and dispenser of information but should have the role of a questioner and a facilitator. Fasko (2003) adds that in order to create a classroom environment to develop students' critical thinking, teachers can challenge their students' thinking by posing problems, having discussions, and raising questions. These questions are defined as High- Order questions by Todd (1997) and this term is accepted to name the critical thinking type of questions in this study. These strategies have a crucial role in every area of education and language teaching classes are one of these areas.

To lead students to be creative and critical thinkers, the interaction between the teacher and students also the interaction among the students should

be fostered. As mentioned before, Morino Institute (2001) emphasizes that to engage the interaction between the teacher and the students teachers should be good at questioning skill, which is accepted as an effective factor in this process. What's more teachers' questions are important for students' cognitive and meta cognitive improvement in language classes (Açıkgöz, 2002; Myhill and Dunkin, 2002).

Regarding the importance of questioning as an inevitable strategy in language teaching environment, the types and appropriateness of questions used in classrooms should be investigated. According to some studies conducted, the results reveal that teachers generally tend to ask non challenging questions. However, considering the development of students' critical thinking abilities, more challenging questions which require students to analyze, synthesize, evaluate, and state their personal reasons should be asked. To give students this chance, Listening/Speaking classes go one step further since in those classes the interaction between the teacher and the students is inevitable.

For this reason, especially in Listening / Speaking classes, teachers should investigate their questions in depth, and should consider whether those questions require students to think. Therefore, the aim of the current study is to explore the types of questions teachers ask in Listening / Speaking classes and to see whether High- Order questions are asked or not.

1.2. Statement of the Problem

The importance of teaching critical thinking skills in any classroom environment is emphasized recently because it is pointed out that not only for students' school life success but also for their life long success that skill needs to be taught. Having the aim of developing students' critical thinking abilities, many studies have been conducted in literature. The main focus of those studies was to find out how that skill is fostered in reading and writing classes. However, students' critical thinking abilities can be promoted in the other language classroom setting by using different techniques as well. As it is stated, teachers' questions are one of the alternatives which have a crucial role on promoting students' critical thinking abilities. Considering the question answer sessions in classes, it can be said that the interaction between the teacher and the students is seen most in speaking classes. For this reason, this study tries to focus on teachers' questions in Listening/Speaking classes.

Moreover, as it has been stated, as a result of the increasing emphasis on teaching thinking skills, school curriculums were renewed. Anadolu University School of Foreign Languages underwent such a process in 2003-2004 academic year. Teaching critical thinking skills to students was included into the objectives of Listening / Speaking course. In order to develop critical thinkers, first teachers themselves should be critical thinkers in classes who can lead the students into that process. As it is mentioned before, one of the ways of developing critically thinking students can be fostered by raising questions. For this reason, this study is conducted to describe teachers' repertoire of asking

questions in Listening / Speaking courses at Anadolu University School of Foreign Languages. The study tries to find out whether the teachers participating in the current study ask High- Order questions. In addition, the current study also tries to find out whether the teachers ask extra questions which are not stated in the book and questions which lead students to think, analyze, and state their reasons.

According to the findings, the participants can have the chance to make necessary adaptations in their teaching styles. Considering the scope of the study, the results cannot lead to generalization, but similar studies can be conducted, the teachers can explore the situation, and adopt themselves to fit best into their classroom environment.

As a result, the aim of the current study is to find answers to the following research questions.

1.3. Research Questions

- 1) What is the proportion of the High- Order questions within the whole spectrum of questions asked in Listening/Speaking classes at Anadolu University School of Foreign Languages?
- 2) What functions do the critical thinking questions serve?

1.4. Definition of the Terms

Critical Thinking:

According to Critical Thinking Cooperation (2006) critical thinking is an ability which is beyond memorization. When students think critically, they are encouraged to think for themselves, to question hypotheses, to analyze and synthesize the events, to go one step further by developing new hypotheses and test them against the facts.

Questions:

Questions are structures which are instructional cues that convey students the content elements to be learned and directions for what they are to do and how they are to do it (Cotton, 2001).

Echoic Questions:

Echoic questions are structures which do not call for any new information, but are related with the previous answer. Those questions request for comprehension, where teachers check whether the students understood the topic or not, or the questions request for clarification, when the teacher is not sure about the answer that s/he gets from the student, and the questions requests for confirmation, when the teacher may need to check whether the other students have the same idea with him/her, or even to check whether the students have the same idea among each other (Todd, 1997).

Epistemic Questions:

Epistemic questions ask for new information, even if that information is both known by the teacher and the students. Those questions are sub divided as display and referential questions. Display questions are not asked to gain knowledge, the teacher already knows the answer and only asks to test the students' knowledge. Referential questions on the other hand are asked to gain new knowledge. The teacher does not know the answer (Todd, 1997).

High- Order Questions:

Those questions require students to make 'analysis, synthesis, critical thinking' and state their personal reasons (Richards, 1990a:5, cited Todd, 1997).

CHAPTER II: LITERATURE REVIEW

2.1. Introduction

For thousands of years, one of the concepts that have been discussed is the term education. Not only the term has been discussed but also many different ideas have been stated on it. In the past, education was accepted as a way of transmitting the already existing knowledge and cultural values to other generations (Doğanay, 2000). In terms of the teachers in the past, students were regarded as empty vessels, which needed to be filled with knowledge. As for the subject matter that the teachers were going to teach in the class, they thought that students do not know anything about it and that they do not have any experiences. Whether consciously or unconsciously, those teachers could ignore students' individual differences and might disregard boring classroom environments, which resulted in minimal involvement of the students to class. When learners feel that their personal opinions and beliefs are not worth to be listened in the classroom, they become passive learners. As Kabilan (2000) states, when teachers think of themselves as the ones who should provide information and answers to the students, this means that they expose students to "spoon-feeding". For this reason, "the learners' ability to look for answers and solutions, to inquire, to decide, to question, to reject and to accept ideas will greatly diminish".

However, if teachers see themselves as thinkers, initiators, and facilitators, they will help the learners to become a community of thinkers. Spoon-fed

students will not be able to cope with the developments in technology and information age. For this reason, teaching thinking skills has gained importance (Kabilan, 2000). As Brookfield (1987) thinks, many other educators point out that for tomorrow's workers and citizens having specific knowledge will not be as effective as learning and making sense of new information. Since there is too much information with the help of the developing technology, students may need to cope with that information instead of passively accepting it. According to Brookfield (1987), to cope actively in this process, instead of letting others do this on their behalf, students need to make judgments; they need to make choices and decisions for themselves which means that they need to think critically. Therefore, Kerka (1992) pays attention to the importance of high-order thinking skills and says that this is essential and must be taught. In the following part more detailed information is given on critical thinking.

2.2. Critical Thinking

Different scholars approached the idea of critical thinking from different perspectives. Beyer (1995, cited in Fasko, 2003) defines critical thinking as "making reasoned judgments". McBurney (1996, p: 2, cited in Fasko, 2003) considers critical thinking as "an attitude of asking *why*". From Brookfield's (1987) point of view, critical thinking is the thinking process that "results in a discussion, a speech, a proposal or experiment, or a document like a position paper. It can result in a new way of approaching significant issues in one's life or a deeper understanding of the basis for one's actions. Lewis and Smith

(1993, cited in Fasko, 2003) state that critical thinking occurs when a person interrelates or rearranges the information which is stored in his/her memory with the new information that s/he takes.

According to Karen (1997) “Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and /or evaluating information gathered from, or generated by observation, experience, reflection, reasoning, or communication, as a guide to belief and action” (Scriven, 1996, cited in Karen, 1997:1).

From Diestler’s (2005) point of view, someone who thinks critically, uses specific criteria to evaluate reasoning, forms positions, and makes decisions. Ennis (1987, cited in Tama, 1989: 1) suggests that “critical thinking is a reasonable, reflective thinking that is focused on deciding what to believe or do.” Moreover, Carr (1990:1) defines critical thinking as “a way of reasoning that demands adequate support for one’s beliefs and willingness to be persuaded unless the support is forthcoming.”

From Angelo’s point of view “Most formal definitions characterize critical thinking as the intentional application of rational, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference and evaluation” (Angelo, 1995, p.6, cited in Karen, 1997:1).

For Halvorsen (2005) when people think critically on any topic, they involve themselves personally into it and see how they fit into the context. Jones (1996, p: 3-4) explains her view by saying that “Critical thinking is generally agreed to include the evaluation of the worth, accuracy, or

authenticity of various propositions, leading to a supportable decision or thoughtful reflection to analysis and a determined course of action. This is the process that we need to teach our clients". By clients Jones focuses on the students.

Mayer and Goodchild (1990, p: 4, cited in Fasko, 2003, p: 7) define critical thinking as "an active and systematic attempt to understand and evaluate arguments", or "a sequence of internal symbolic activities that lead to novel, productive ideas or conclusions". Also Levy (1997, cited in Fasko, 2003, p: 8) states that critical thinking is "an active and systematic cognitive strategy to examine, evaluate, and understand events, solve problems, and make decisions on the basis of sound reasoning and valid evidence".

Considering the students at college level, Steel (1997, cited in Fasko, 2003, p: 8) defined critical thinking as a skill "which enables individuals to solve problems for which they have no ready- made procedures or solutions".

According to Kurfiss (1988, p: 2) who is an educator, critical thinking is defined as "a rational response to questions that cannot be answered indefinitely and for which all the relevant information may not be available. Critical thinking is an investigation, whose purpose is to explore a situation, a phenomenon, a question, or a problem to arrive at a hypothesis or a conclusion. In critical thinking, all assumptions are open to question, divergent views are aggressively sought, and the inquiry is not biased in favor of a particular outcome".

Similarly, many educators accept critical thinking as a valuable skill. For example, English language teachers state that it is vital to elaborate an argument and develop implications, understand, analyze, evaluate arguments, and support with details. However, some teachers complain about students' inability to synthesize ideas and accept assumptions without questioning (Powers and Enright, 1987, cited in Kurfiss, 1988).

From all those definitions given above, it can be said that when students are expected to think critically, they are expected to think from different points, or they should think in depth. Also students are expected to make analysis, to make synthesis with the previous knowledge that they already have in their minds and evaluate that knowledge, reason the events and state their personal ideas about those events. For this current study, the key points which will be taken into account are whether teachers lead students to think, analyze, synthesize and state reasons through the questions they ask which function as High- Order questions.

Although students are expected to be critical thinkers, it does not develop quickly and automatically by itself. As Chalupa & Sormunen (1995, cited in Thoms, 2004) point out, this skill can be developed with a great deal of effort on the part of teachers by incorporating critical questioning into their classrooms, which is one of the ways among many alternatives. Briefly, it can be said that the responsibility of developing critical thinking skill is greater on teachers than the students since questioning is considered the guiding force from teachers' part. Chalupa & Sormunen (1995, cited in Thoms, 2004) add

that not the textbooks but the teachers have an effective power in shaping students' ability to think, which means that in order to develop students' critical thinking abilities instructors can have the leading role.

Briefly, in order to help the students in this difficult process, teachers can take some prevention to develop critical thinkers. In the following part some information will be given about the activities that can be conducted to promote students' critical thinking abilities.

2.3. How to Promote Critical Thinking in a Classroom Environment

In terms of the teachers' roles in the classroom, Schafersman (1991) claims that, one of the best ways to teach critical thinking is to make students write term papers. With the help of writing, Schafersman (1991) says that students try to organize their thoughts, organize the data in a logical way, and present their conclusions in a persuasive manner. Schafersman (1991: 7) adds that "Good writing is the epitome of good critical thinking". King (1995) also fosters Schafersman's (1991) thought on developing critical thinkers by writing. He clarifies his idea by saying that, before writing their thoughts down on the paper, learners need to identify issues, formulate hypotheses and arguments and then they need to clarify their thoughts in a logical way.

Halvorsen (2005) also drew attention to different techniques of developing critical thinkers in class. One of the techniques was defined as media analysis. He states that, when students are given any kind of form of media, they are forced to think in terms of media bias and censorship. This opportunity gives

students the chance to think on these biases and to reflect on these in detail, which can encourage them to think about the issues that affect their lives.

Another way of developing critical thinkers can be achieved through problem solving activities, where students are expected to analyze complex problems like city's poor public transport system and by looking at the pro's and con's of those problems students can be forced to think critically by being expected to solve those problems according to their own ideas.

Ngeow and Kong (2003) drew attention to another activity which promotes critical thinking in class. This activity is described as discussion. Engestrom (1999, cited in Ngeow and Kong ,2003) states that, when discussions are held properly in class, they can be effective tools for promoting students' thoughts and creativity, since learners need to synthesize the new information with the prior one and with their own experiences.

In addition to all those ways of developing critical thinkers, Potts (1994) mentions that asking open- ended questions which do not have one correct answer can be one of the steps in developing critical thinkers. According to Potts (1994) that type of questions encourage students to answer more creatively since the students do not have the fear of giving a wrong answer. The importance of questions is also stated by Paul and Elder (2001) by pointing out that the quality of the question asked determines the quality of the answer. Thinking is of no use unless it goes somewhere productive. As Paul and Elder indicate, deep questions drive the thought underneath the surface of the things and force to deal with complexity. Deep questions are those which do not only

need Yes or No as an answer. Parallel to Paul and Elder, Cotton (1991) adds that questions asked by teachers can serve as effective prompts for promoting students' use of specific thinking in different contexts. Thus, with the help of questioning, teachers will not only be able to get factual information but also will lead learners in making connections between different concepts, help them make inferences, encourage their imaginative and creative thought. The teachers will also explore the students' deeper levels of knowledge, thinking, and understanding.

In terms of the classroom environment, in order to lead the students to think, the teachers should change their roles. In other words, instead of standing in front of the class and giving information, teachers should have the role of fostering critical thinking.

In brief, it can be said that to achieve the aim of developing critically thinking students, the teachers have a great role on students by asking questions which will help students to think, question, analyze and support their views. Besides developing critically thinking students, questions also serve different functions for the teachers, which are described in the following part.

2.4. Functions of “Questions”

Richards, Platt, and Platt (1992: 303, cited in Scales and Shen, 2004) clarify the functions of questions as the following: “When questions are used appropriately, they can cause wonder, uncertainty, doubt, or suspicion, also they

can lead to new knowledge and skills, help to quell controversy, and promote useful discussion”.

Richards and Lockhart (1996, cited in Cundale, 2001) emphasize the importance of questions as useful tools and describe the functions of the questions from different perspectives:

- “1. Questions encourage student involvement in learning
2. Help weaker students participate
3. Help elicit particular structures and vocabulary
4. Stimulate thinking
5. Enable teachers to check understanding”

In his description of questions’ functions, Cotton (2001) agrees with the functions stated by Richards and Lockhart and also adds a few more functions as reviewing and summarizing the previously learned lesson, nurturing insights by exploring new relationships, evaluating students’ preparation and checking on homework or seatwork completion, stimulating students to pursue knowledge on their own.

The descriptions given by Richard and Lockhart (1996, cited in Cundale, 2001) and Cotton (1991) state that besides having different functions questions also have the function of developing critically thinking students which is mentioned through ‘Stimulating Thinking’ by Richards and Lockhart (1996, cited in Cundale, 2001) and as ‘Nurturing insights by exploring new relationships’ by Cotton (2001).

In brief, it can be said that the teachers have a great role on students by asking questions which will not only help students to be productive but also will help them to think, question, analyze and support their views. For this reason, teachers should not only tend to ask questions that are too easy or difficult but also should ask questions which lead students think and discuss in the classroom. In other words, the teacher should filter the questions before asking to ensure that students can benefit at most from those questions. In any class where the teacher makes effective use of questions there will be something to gain for the students because such environments not only attract students' attention but also provide an effective experiential learning environment for them (Sönmez, 2001). As it can be seen from the argument, questions are not only teachers' assistant, but also means to develop students' knowledge both intellectually and cognitively. In other words, they are the tools to promote higher level thinking skills (Schiller, 2001).

In this study, only 'questioning' and especially the questions which function as High- Order questions will be investigated since they seem to be the commonest used tools for this purpose.

So, within this perspective it would be better to give some information about the types of questions as they are defined in literature.

2.5. Question Types

As the art of asking questions is considered to be one of the basic skills of good teaching and developing the thinking abilities of the students, question-answer sessions have been exploited by the researchers since the time of Socrates

(Wilson, 1997). That is, the concept of critical thinking became popular 2.400 years ago with Socrates (Paul, 1985, cited in Fasko, 2003). Besides its long history and effectiveness, Socratic Questioning is a widespread used teaching technique. Socratic questioning is beyond getting one- word response from the students. Briefly, it means having students make assumptions, explain points, and understand the difference between the relevant and irrelevant points. As for Paul (1990, cited in Thoms, 2004, p: 2) Socratic questioning:

- Raises basic issues;
- Probes beneath the surface of things;
- Pursues problematic areas of thought;
- Helps students discover the structure of their own thought;
- Helps students develop sensitivity of clarity, accuracy, and relevance;
- Helps students arrive at a judgment through their own reasoning;
- And help students note claims, evidence, conclusions, questions-at-issue, assumptions, implications, consequences, concepts, interpretations, points of view

Over the years questions have been defined and categorized differently in literature. Different questions have been defined and categorized differently by the researchers in the seventies (e.g., Kearsley, 1976, cited in Yamazaki, 1998) and eighties (e.g., Hakasson & Lindberg, 1988, cited in Yamazaki, 1998) and they are still being developed. When different classifications are compared, some overlapping points are detected by the researchers. In the following part, the different classifications will be discussed considering the overlaps.

One of the classifications is based on the answers teachers get from the students. Gabrielatos (2001), under the broad category of pedagogical questions, classifies questions as Yes/No questions, Open-ended questions, Convergent and Divergent questions. Yes/No questions are the questions which require only “yes” or “no” as a response. On the other hand, open-ended questions have no specific right answer and can be used in the elicitation of longer responses. Similar to the open-ended questions, when convergent and divergent questions are asked students are expected to give long answers. For the convergent questions, the teacher expects to hear only one correct answer. In asking such a question which has a predetermined “known” answer, the teacher has the role of “primary knower” (Berry, 1981, cited in Dashwood, 2005). In that kind of questions students are expected to give the specific answer which the teacher has in his/her mind. Those question types are not appropriate for discussion. However, when teachers use the latter question type, divergent, students will have the opportunity to express their ideas, opinions, and beliefs. In those types of questions the teacher does not have control on the answer of the students so s/he becomes a “secondary-knower” (Dashwood, 2005).

Sunda (2003) also has a similar categorization regarding the question types. She defines questions as skinny and fat questions. According to her, skinny questions are those which can be answered with a short answer or by using basic recall of factual, literal information; whereas fat questions are open-ended, there are more than one right answer, and those answers may need deeper thought through analysis, interpretation or evaluation. An example for a skinny question

can be given as: “What does Aunt Beast look like?” and an example for a fat question: “Would you say the author is supportive or critical of the ways the Aleats hunted? Support your views” (Sunda, 2003: 12)

In another classification Nunan (1989) suggests two categories as , “display vs. referential” (Nunan, 1991; Farooq,1998; Maley,2003) and “open vs. closed”. Display questions are those where the teacher simply checks whether the students know the answer or not. Similar to Gabrielatos’ (2001) convergent questions and Sunda’s (2003) skinny questions, these questions require less genuine interaction between the teacher and the students. The main concern in asking these questions is the teachers’ desire to confirm that the subject matter has been internalized by the students. Communication is less meaningful, and it is usually the language that matters rather than the meaning the students try to convey. According to Maley (2003) in the initial stages of language learning questions can be beneficial especially in terms of recycling the new language. Referential questions, on the other hand, as the divergent ones described by Gabrielatos (2001) and fat ones defined by Sunda (2003) are those in which the interaction between the teacher and the students is genuine, since the teachers themselves do not know the answers to the questions, or the questions vary from one student to another. There is more personal involvement and interest from the students’ perspective, since the teacher pays attention to the meaning rather than the form (Maley, 2003). From Maley’s (2003) point of view, the distinction between open and closed questions is related with both questions’ property in terms of the availability of alternative responses to the question and the length of students’ response. Closed

questions require less production from the students, and the question itself can be answered in only one way. Open questions, on the other hand, can be answered in various ways over a longer period of time (Nunan, 1989; Maley, 2003).

The Morino Institute (2001) classifies the questions as: Factual, Interpretive, and Evaluative Questions. Factual questions are those which have only one correct answer, like “What did you have for breakfast tonight?” In this sense, factual questions function like convergent questions which were mentioned before. Interpretive Questions, which are similar to open-ended questions, have more than one answer. Evaluative Questions ask for some kind of opinion, belief or point of view, like “What would be a good place to take the kids on a field trip?” That kind of questions have no wrong answers. These questions, like divergent questions, trigger more processing and require students to think in depth.

Todd (1997) also classifies the questions under five different categories as based on the surface form of the question, the focus of the question, the possible answers to the question, the communicative value of the question, and the nature of thinking called for by the question.

In his first categorization based on the surface form of the questions, Todd (1997) states that not all the questions are interrogatives. A commonly used technique by the teachers is giving an unfinished sentence to the students. With the help of intonation or gesture students are expected to complete the sentence. For example: “So, he wants to...?” (Todd, 1997).

The second categorization which is based on the focus of the questions is divided under two sub- categories as **a.** global v. specific questions and **b.** language v. real- life v. procedural questions. In order to answer the global questions, students should acquire the passage as a whole whereas specific questions can be related with one sentence or utterance from the text (Todd, 1997). Language v. real- life v. procedural questions deals with the communicative orientation of the questions. In other words, whether the questions focus on the language like: “What part of speech is this?” (Todd, 1997) or whether the focus is on real- life like: “What sports do you like playing?”(Todd, 1997). Procedural questions on the other hand deal with classroom focus as in the following example “Did you bring your homework?”

The next classification of Todd (1997) is based on the possible answers given to the questions and this has also two sub- categories like **a.** polar v. alternative v. wh- questions and **b.** convergent v. divergent questions. The convergent and divergent questions are defined parallel to Gabrielotos’ (2001) definitions. Polar questions are defined as those which require a yes/ no answer like “Do you like chocolate”. Alternative questions on the other hand offer a choice for the possible answer. For example, “Did you go on Saturday or Sunday?” is an alternative type of question (Todd, 1997).

The fourth category of (Todd, 1997) is based on the communicative value of the questions which refers to the value of the information conveyed in an exchange to the interlocutors. This category is also divided under two sub categories named as **a.** display v. referential questions and **b.** echoic v. epistemic

questions. Display and referential questions are parallel to the definitions of Nunan (1989), Farooq (1998), and Maley (2003). That is display questions require short answers, whereas referential questions require more genuine interaction between the speakers. Echoic questions are said to refer back to the previous response without calling for new information (Todd, 1997). These questions are sub- divided into comprehension checks “Does everyone understand “polite?” , clarification requests “What do you mean?”, and confirmation checks “Did you say “he?” (Todd, 1997). Epistemic questions on the other hand ask for new information.

The last category is defined by Todd (1997) as the nature of thinking called for by the question. This categorization is related with the cognitive process students are expected to do in order to answer a question. This category is also divided under two sub- categories, first of which is text related categorization which is called **a)** literal v. inference v. background questions. For literal questions, students are expected to find the right place of the questions in the text. “What is the name of the hero in the story?” is an example for this sub- category. Also the information can be in the text but may be contextually implicit, where the students are expected to make inference to answer those type of questions. For example, “Why do you think John had no money?” is a question for inference (Todd, 1997). Moreover, questions may call for background knowledge which is not provided in the text like “How do British people celebrate Christmas?” (Todd, 1997). The second sub- category of this group is related with the thinking process of the students which requires them to make analysis and synthesis before a

response is given. This sub- category is called **b)** low order v. high- order questions. Low- order questions are also factual questions which recall of facts and specifics (Cole and Chan, 1987, cited in Todd, 1997). “What does pollution mean?” can be given as an example for low- level question according to Todd (1997). Low- order questions are also called epistemic questions which include display and referential questions. High- order questions, on the other hand, “require synthesis, analysis, and critical thinking” (Richards, 1990: 5, cited in Todd, 1997: 54). In such a question “Can you compare the two main characters in the story?” students are expected to do analysis and state their ideas. According to Todd (1997), High- Order Questions are categorized based on Bloom’s Taxonomy of educational Objectives.

In a recent classification proposed by Yamazaki (1998), questions are categorized under seven sub-categories under two broad groups. “**1** Echoic Types: **a.** Comprehension checks, **b.** Clarification requests, **c.** Confirmation checks, **2.** Epistemic Types: **a.** referential, **b.** display, **c.** expressive, **d.** rhetorical.” In comprehension check questions, such as “Did you understand?”, the purpose of the teacher is to check whether the students understood the subject or not. Clarification requests are used to ask for further clarification. Questions like, “What did you say?”, “Pardon me?” (Yamazaki, 1998: 7) can be given as examples for such questions. Confirmation checks is the last question type in Echoic Types, “No one agrees?” (Yamazaki, 1998: 7) and “Did you say “he”?” (Long and Sato, 1983: 276, cited in Todd, 1997) are examples for confirmation check question types. In terms of Epistemic question types; Yamazaki (1989) has

four sub- categories defined as referential, display, expressive, and rhetorical questions. In his definitions of referential and display questions, Yamazaki refers to the definitions suggested by Nunan (1991) and Maley (2003). As for Yamazaki (1998) rhetorical questions do not function as real questions, they are asked to impress students and grasp their attention. An example for rhetorical question is, “They open the refrigerator. Ha! Is there anything to eat? They find some food...” (Yamazaki, 1998: 7).

In brief, those are the question types which have the function of checking students’ comprehension, checking for clarification, and checking for confirmation. In any ideal class those questions asked by the teachers should occur. However, having the aim of developing critically thinking students, teachers should make use of questions which have the function of leading students to think, analyze, synthesize, and state their reasons.

Karron (2005) gives some ideas about how to foster students’ thinking skills. He states that, students can have the chance to express their ideas and to think critically at the same time when they are asked such questions: “To what extend?” “How?”, “Under what circumstances?”, “Why?” “Compare (or contrast)”. Glock (1986, cited in Hirose, 1992) suggests that verbal critical thinking skills can be reinforced by teachers when they ask “Why?” type of questions rather than “Who?” and “Where?” type of questions.

King (1995: 1) gives other examples for questions that can promote students’ critical thinking such as : “What do you think causes this? Why?”, “Do you agree or disagree with this statement? What evidence is there to support your answer?”,

“What are the implications of...?”, “How does it tie in what we have learned before?”, “What is the best and why?”, “How does it apply to everyday life?”, “What are the implications of it?”

Syque (2002: 1) also gives some examples for question types which make students think deeply. Those questions are also defined as “Socratic Questions” and they are categorized under the following sub- categories. The first one is *Conceptual Clarification Questions*, where the teacher asks questions like: “Why are you saying that?”, “How does this relate to what we have been talking about?”, “Are you saying...or...?”. The second subcategory is *Probing Assumptions*, which includes “How did you choose those assumptions?”, “How can you verify or disprove that assumption?”. The third sub- category is *Probing Rationale, Reasons and Evidence*. The examples for this category are: “Why is that happening?”, “What evidence is there to support what you are saying?”, “On what authority are you basing your argument?”. The next sub- category is *Questioning Viewpoints and Perspectives*. The choices in this category are “Another way of looking at this is... does this seem reasonable?”, “What if you compared...and...?”, “Why is it better than?”. Finally, the last sub- category is *Probe Implications and Consequences*. “Then what would happen?”, “How does ...fit with what we learned before?”, “What are the implications of...?” are examples for this sub- category. All those questions are examples for questions which take the students one step further to think, analyze, synthesize, and to think critically. Those questions are parallel to Todd’s (1997) fifth classification which is based on the nature of thinking. For this current study Syque’s (2002)

classification of questions is taken for granted in order to classify the functions of the High- Order questions.

From all the classifications given above it can be concluded that there is an overlap between the types of the questions classified. In other words, questions with the same functions are generally defined by using different terms. This current study aims to find out the question types that teachers ask in Listening/ Speaking courses in general in order to see the amount of questions asked and to find out whether high- level questions, that is questions leading to critical thinking are asked or not. For this reason, to find answers for the research questions, Todd's classification based on Echoic, Epistemic and High- Order Questions is taken as basis for this study. According to Todd (1997) Echoic and Epistemic questions are based on the communicative value of the question. Questions asked in everyday life are different from the ones asked in a classroom environment. Todd states that, in a natural classroom environment teachers need to check whether the students understood the topic or not for which they ask comprehension check questions. Also they may need to confirm what the student said for which s/he can ask confirmation check questions. Moreover, the teacher may need to clarify what the student said and in that kind of situations s/he may make use of clarification request. Considering the way the classes are conducted, teachers also make use of questions which require knowledge- seeking questions to gain new knowledge. The teacher may not know the answer and in classroom discourse analysis these questions are defined as referential questions. On the other side, display questions may not be asked to gain knowledge instead the

teacher already knows the answer and only asks to test the responder. Both referential and display questions are named as Epistemic type of questions by Todd (1997). This categorization is also taken for granted in this study since those questions are also inevitable in an ideal classroom environment. The last categorization is based on the nature of thinking called by the question. This categorization is related with the cognitive process the students go through when they are expected to answer a question. Those questions require students to make analysis, synthesis, reasoning, and evaluation before giving an answer. This categorization is also divided under a sub- category named Low- Order and High- Order questions. Low- order questions are knowledge based questions as Todd (1997) states, for this reason, for the current study questions which have the function of High- Order questions are also taken as basis.

With the help of this classification, this current study will try to find out how close the teachers are to achieve the objective of developing critical thinkers and enhancing critical thinking in Listening / Speaking classes. As questions are at the core of teaching and learning and are strategies that facilitate critical thinking, this brings teachers to the point of considering what type of questions they ask in class (Maley, 2003). The following part will give some information about the studies conducted on critical thinking and questioning.

2.6. Studies Conducted on “Critical Thinking” and “Questions”

A broader study was conducted by trying to infuse thinking into curriculum content at Nanyang Technological University in Singapore. The aim of the infusion project was to evolve a model for a thinking curriculum for vocational education that would shift the emphasis from content knowledge to more problem solving, application and creativity. The implementation of the thinking curriculum was carried out over three years, and the results showed that the curriculum innovation resulted in greater motivation and ability in solving problems. Staff development and support emerged as the most critical factors in the success of the thinking initiative (Ong, ?).

Besides implementing the thinking process in the curriculum, teachers' roles and readiness for this process is also important and related with this Kürüm (2002) conducted a study at Anadolu University Education Faculty. The aim of her study was to identify critical thinking abilities and the levels of thinking abilities that constitute this ability and the factors which influenced critical thinking of teacher trainees studying at Anadolu University Education Faculty. The results of the study showed that teacher trainees' critical thinking abilities and all levels of thinking abilities were at mid- level and that these abilities were effected by different factors such as age, high school types graduated, score type and level in university entrance exam, program being studied, education and income level of the family, and activities held for developing themselves.

Another study conducted by Reed (1998) aimed at investigating the effect of integrating Richard Paul's model for thinking into a U.S. History course on community college students' 1) critical thinking about U.S. history and about everyday issues, 2) dispositions about thinking critically, and 3) knowledge of history content. As a result, three major findings emerged from this study: 1) community college students' abilities to think historically and to think critically improved in a single course; 2) community college students' end of term knowledge of history content did not suffer when they were trained in critical thinking abilities as it was integrated into course material; 3) age and gender did not play significant roles in developing college students' critical thinking abilities.

Profetto, Grath, Smith, Rene, and Younge (2004) also conducted a study which explored, described and compared the types and levels of questions asked by 30 randomly selected tutors and their 314 students in context-based learning tutorial seminars in a Canadian baccalaureate nursing program. The results of the study indicated that the majority of questions asked by tutors and students were framed at the low level (knowledge, comprehension, and application) and were aimed at seeking yes/no responses and factual information more than probing. This study recommends the tutors and the students to be taught how to question, to create a supportive environment for questioning and using appropriate strategies to teach the use of higher order questions since those questions require analysis, synthesis, and evaluation which are believed to activate and facilitate critical thinking.

Related with the effects of questioning on the development of critical thinking, a study was conducted by Yang, Newby, and Bill (2005) based on the effects of using Socratic questioning. In this study it is used to enhance students' critical thinking (CT) skills in asynchronous discussion forums (ADF) in university-level distance learning courses. The research empirically examined two coherent subjects: (a) the efficacy of teaching and modeling Socratic questioning for developing students' CT skills in ADF and (b) the persistence of students' CT skills following the teaching and modeling of Socratic questioning in the ADF. The results indicated (a) teaching and modeling of Socratic questioning helped students demonstrate a higher level of CT skills and (b) students maintained their CT skills after exposure to and modeling of Socratic questioning in the ADF.

In terms of the questions and their types, some studies have also been conducted. Suter (2001) investigated the types of questions used in class and the feedback the teachers provided. The result revealed that referential questions were more effective in terms of starting a real interaction which is the aim to be created in a classroom environment. In brief, it can be said that to achieve an interactive classroom environment, the teacher has a great role by asking the right questions by which students will not only be productive but also will have the chance to think, question, analyze and support their views.

In order to achieve an interactive classroom environment it is suggested that teachers should pay attention to the use of referential questions however; many research studies reveal just the opposite. That is, display questions are used more than the referential questions. As Crookes and Choudron (1991, cited in Todd,

1997) argue that referential type of questions are used in conversations outside the classroom whereas in the classroom teachers ask far more display questions.

This is also what Shomoosi (2004) found in his study conducted on the effect of teachers' questions. Crookes and Choudron (1991, cited in Todd, 1997) state that the reason for asking more display questions over referential questions in class may be the classroom environment itself since it is different from the real life environment. No matter what the classroom environment is, considering the development of the students, teachers should pay attention to their questions as they are inevitable tools which effect students' cognitive and meta cognitive development (Açıkgöz, 2002).

Another case study was carried out by Rathawan, Suzanne, Dhanan, and Paul (2003) on learners' oral responses to spoken questions, specifically, various types of questions at Thai University. The study investigated how students at different levels of English language proficiency responded differently to separate types of questions in terms of the number of words in their responses. According to the results of the study it was found that there are similarities between the students at the middle and high proficiency levels in which they had same ranks of the number of words in replies to every question form, that is, to wh-, others, yes/no, tag in order. The low proficiency level, however, produced the most words in replies to 'other' questions, then to yes/no, wh- and finally tag questions. Nonetheless, the results showed that the low proficiency level tended to produce the fewest words in replies, except to 'other' questions when the middle proficiency level produced the fewest words in replies. The findings also revealed

that all proficiency levels are the same in that they produced the fewest words in replies to tag questions. However, the students found a far great number of questions difficult to answer. Those questions asked for students' ideas as in the following examples: "If you could choose, would you choose to study abroad instead?" and "If you had one million dollars, what country would you like to visit?" The results of the study provided useful information about use of high-level questioning. They revealed that the questions (asking for opinions on something or calling for evaluation or judgment) is an effective way to make students provide longer answers. The researchers of this study have the opinion according to which it is crucial to make use of teacher questions to benefit the most in terms of classroom interaction, including using a variety of types of questions.

Moritoshi (2002) also carried out a study based on questioning, modification and feedback behaviors of teachers and their implications for learner production. The study was conducted in a Japanese junior school class of 35 students (19 male, 16 female), aged 14-15 years and their female Japanese teacher of English as a foreign language, aged 31, with 9 years of teaching experience. In his study the researcher found out that the teacher asked more display questions (40.58%) over referential questions (7.25%). Other question types included for the classification were rhetorical, procedural, and interaction types. The findings of this study are parallel to the findings of other researchers.

Oberli (2003) conducted another study on questioning and feedback in the interactive classroom at the Institute of Yonsei, a university in Seoul. The class

observed consisted of seven upper- intermediate adult learners, who shared the same first language and educational background at university level. The teacher has been with Yonsei for six years, is highly qualified and is a figure of stature not only in his Institute but also within the local EFL community. What Oberli found in the study is that the participant teacher asked 6.7% Divergent questions, 87.6% Convergent questions, and 33.7% of the Convergent questions included Yes/No answer questions.

Moreover, there is a program described by Orletsky (1997) which is designed to enhance student learning by improving teachers' classroom questioning techniques (QUILT). This is a staff development program designed to increase students' thinking time by helping teachers improve their classroom questioning techniques. During 1991-92, the QUILT program was classroom tested in 13 school districts with more than 1,200 teachers across Appalachia Educational Laboratory's four- state region. At one school in each district, teachers received the complete, year long QUILT program beginning with a 3-day induction training, seven follow- up sessions, and teamwork with colleagues throughout the school year. Teachers at two comparison schools in each district received an abridged version of the training lasting either 3 days or 3 hours. These comparisons more closely resemble traditional staff development than does the complete QUILT program. At all three schools in each district, before- and- after test measured what teachers knew about asking questions, what attitudes they held that might facilitate or impede effective asking of questions, and how they actually asked questions in classes as revealed videotapes. From the analysis of

these test data, the QUILT program can claim to show an increase in teaching *understanding* of effective classroom questioning of effective classroom questioning and a corresponding *use* of effective questioning practices along with an increase in student thinking. According to coded videotapes, students in grades kindergarten through 12 answered at higher cognitive levels significantly more often after their teachers participated in the QUILT program. These students also asked more significantly clarifying questions than did students whose teachers were in a comparison treatment group. The findings of this program can be adapted to programs which have the same aim of developing critically thinking students.

2.7. Conclusion

Questions have been exploited by researchers since the time of Socrates. Being one of the most important teaching tools in the classroom environment, questioning skills get researchers attention (Wilson, 1997). Asking the right questions is considered as one of the most crucial elements of effective teaching and developing students' cognitive and meta cognitive abilities (Açıkgöz, 2002).

Through the use of different question types, teachers can check students' comprehension, can help weaker students participate, can elicit particular structures and vocabulary, and can make students think, analyze, synthesize from different perspectives and state their personal ideas through their own experiences. For this reason, it is expected that teachers should pay special attention to use a variety of questions. With a research aiming at the description of

the state on question types and their functions, teachers can develop a deeper understanding of the effects of the questions on students' thinking.

CHAPTER III: METHODOLOGY

3.1. Introduction

This study aims to investigate the question types the teachers ask in Listening/Speaking classes. Since the questions have an important effect especially in developing critically thinking students, investigating the data will shed light on teachers' attitudes in asking questions especially the ones that give chance to students to think.

3.2. Participants

For the current study, the classes of eight teachers and with thirty students in each class were video recorded. The students were enrolled in Intermediate level according to the Michigan Placement Test which is held at the beginning of the term. The reason for choosing students studying at Intermediate level is that, the level of the students effects the questions that the teachers ask in class (Brown, 1994, cited in, Todd, 1997). Brown suggests that asking lower- level questions can be beneficial for students with less proficiency level whereas asking higher-order questions can be beneficial for students in advanced levels. For this reason, to conduct the current study it was thought that working with Intermediate level students would be appropriate since the level of the students will not be a restrictive factor in terms of choosing the questions (Brown, 1994, cited in, Todd, 1997).

Students at that level have twenty six hours of language classes in a week and eight hours of these is carried out as Listening/Speaking course. The

instructors participating in this study ranged from 24 to 39 years old and had experience from 2 to 15 years. In the study, the teachers are coded with letters from A to H.

Teacher (A) is a native speaker with fourteen years of teaching experience in total but has one year of teaching experience at Anadolu University School of Foreign Languages. Teacher (B) is a nonnative speaker with twelve years of teaching experience in total but has six years of teaching experience at Anadolu University School of Foreign Languages. Teacher (C) is a nonnative speaker with six years of teaching experience in total at Anadolu University School of Foreign Languages. The teacher coded with the letter (D) is a native speaker with eight years of teaching experience in total at Anadolu University School of Foreign Languages. Teacher (E) is a nonnative speaker with five years of teaching experience in total at Anadolu University School of Foreign Languages. Teacher (F) is a nonnative speaker with eight years of teaching experience in total at Anadolu University School of Foreign Languages. The teacher coded with the letter (G) is a nonnative speaker with two years of teaching experience in total at Anadolu University School of Foreign Languages. The last teacher participated in this current study is coded with the letter (H) and he is a nonnative speaker with six years of teaching experience in total but has been at Anadolu University School of Foreign Languages for five years.

The information about the teachers is presented in Table 1.

Table 1 Background Information about the Teachers

TEACHERS		AGE			EXPERIENCE IN TOTAL			QUALIFICATIONS			EXPERIENCE IN ANADOLU		
NATIVE	NONNATIVE	Below 25	25-30	36-40	1-5	6-10	11-15	BA	MA	Certificate	1-3	4-6	7-9
2	6	1	3	4	2	4	2	8	6	2	2	4	2
A,D	B,C, E,F, G,H	G	C,E,H	A,B,D F	E,G	C,D,F,H	A,B	A,B,C,D,E,F,G H	A,B,C,D,E F	B,D	A,G	B,C,E,H	D,F

From those eight participants, the instructors participating in this study were chosen according to their teaching experiences and their native languages because this might be a distinctive factor for the results of the data. The first participant (D) is a native speaker with eight years of teaching experience at Anadolu University School of Foreign Languages and he also has his MA degree in Foreign Languages. The second participant (F) is a nonnative speaker with eight years of teaching experience at Anadolu University School of Foreign Languages and graduated from ELT Department and has her MA degree in ELT department. The third participant (G) is a nonnative speaker with two years of teaching experience at Anadolu University School of Foreign Languages and graduated from ELT Department as well.

3.3. Data Collection

To collect the effective and reliable data, the classes were video-taped through eight class hours in Listening/Speaking course. As it is recommended by Nunan (1989), the tripod- mounted video camera was located to the rear of the classroom, the researcher did not attend the class in order not to effect the students and the teachers. The camera was set to record prior to the start of the lesson. For the Listening/ Speaking course the teacher and the students met four days during the week and for each day they had two class hours as Listening/ Speaking which were held successively in total of 90 minutes. The teachers completed a unit in the book within a week (8 class hours). All the teachers were recorded while they were teaching the same unit, Unit 9 “New Frontiers”. Since

the dates that the teachers started the unit varied, the total process of recording lasted for three weeks between the 12th of December 2005 and 2nd of January 2006. For each participant, four video cassettes (each of 90 minutes) were recorded.

3.4. The Book Used by the Teachers and the Chapter Studied During the Video Recording Session

As a course book, which is an integration of speaking and listening skills, students follow the Interactions 1 from the series by McGraw Hill Contemporary. During the recording session the students were studying Unit 9 “New Frontiers” (see Appendix 1).

This unit and the other units in the book include 4 parts. Part 1 (see Appendix 1) includes some pre- listening questions, vocabulary exercise and a listening text which focuses on the main idea. Part 2 (see Appendix 1) is mainly about a lecture which was a debate about the effects of the full moon.. In this part, students were expected to fill out an outline while listening to the lecture and after listening, with some guided discussion questions students shared their ideas about the topic. Part 3 (see Appendix 1) focused on an activity which was based on getting meaning from context. In this activity, there were 5 different short conversations with a following question for which students are expected to find the right answer. Part 4 (see Appendix 1) was based on “Listening and Speaking in the Real World”. More detailed information is given about the parts of the chapter below.

It can also be seen in Appendix 1 that there are 4 main parts in each unit. The first part starts with “Before you listen”. This part includes one pre- listening question which functions as a High- Order Question because before listening to the text with the help of that question students are expected to express their own ideas by evaluating their thoughts and ideas. The question is as the following “*What are the advantages and disadvantages of space exploration?*” This pre- listening part is followed by a vocabulary activity. For the “Listen” part, first students listen for the main idea; later on they listen for stressed words. For the first listening, students are also asked three questions in the book about which they discuss beforehand and then listen in order to find the answers of the questions. Here, the second question functions as a High- Order Question. The question is, “*What is an advantage of living in a space colony?*” since this question is asked as a pre- listening question, the students are expected to think on the topic, evaluate their ideas, and express their thoughts to the teacher and their classmates as well. The unit also has an activity for vocabulary preview on page 179 (see Appendix 1).

As a next step, students continue with studying the “th” sound, and they learn some expressions for introducing surprising information. There is another interesting activity about playing a game called “Truth” or “Lie”. Here, the students are expected to make up a story about them but that story must be something surprising or unexpected. When one of the students tells his/her story, the others try to guess and vote whether the story was true or not.

The next activity in Part 1 is about “Solving a Science Problem”. According to this activity, a spaceship has crash- landed on the lighted side of the moon. To go to another spaceship, the crew has to walk two hundred miles and because of this distance they can take a very limited number of items with them. Students are expected to rank the items from the most important one to the least important, and they are asked to explain the choices they made. That is, this activity also includes an explicit question which functions as a High- Order Question.

In Part 2, students listen to a lecture about full moon’s effects. This lecture also has four pre- listening questions. The first question in this part is a question which asks for students’ knowledge about the effects of the moon on the physical environment. Here the students are expected to evaluate their previous knowledge with the events and express their ideas. The third question included in this part is also related with students’ personal idea in which they are expected to express their ideas about the effects of full moon on people’s behaviors. In other words, this question also functions as a High- Order Question. After listening, students have an outline to complete about the lecture. After completing the outline, they have some discussion questions on page 188, exercise 8. The fifth question says “*Which speaker “won” the debate, in your view? Why?*” which is an explicit High- Order Question. The same part, Part 2, continues with another activity which includes 5 sample topics for debate and this time students do a kind of debate among themselves.

Part 3 starts with “Getting Meaning from Context” activity where students listen to 5 different short questions and find the correct choice. This part includes some expressions which express interest or surprise.

The last part is based on “Listening and Speaking in the Real World”. This part starts with pre- listening questions, and then the students listen to a game show and try to find the answers of the questions. This part and also the unit finish with an activity which is based on “Ordering event in a Story”.

Briefly, this chapter includes 6 questions which have the function of High-Order questions.

3.5. Data Analysis

The data which were collected through video- recordings were transcribed and then the transcriptions were analyzed. During the analysis, the questions asked by the teachers were identified and categorized to sort out the frequency of the questions. The utterances which were orders, recast and rhetoric type of questions were excluded from the study since they do not function as questions. Both quantitative and qualitative data analysis was carried out.

As the quantitative analysis of the results, the transcribed lessons were analyzed by the researcher in order to find the distribution balance for teachers’ Echoic, Epistemic and High- Order Questions, as in the classification of Todd (1997). In other words, for the quantitative analysis of the results, the researcher tried to find out how many questions the teachers asked to check comprehension, how many questions they asked for clarification and how many questions the

teachers asked to promote students' critical thinking. During the identification and categorization process the researcher and one of her colleagues, who had six years of teaching experience, graduated from ELT department and had her MA degree, worked separately and analyzed one third of the transcriptions and later on with the researcher they discussed and decided on the question types focusing on Todd's (1997) classification. In order to find the inter-rater reliability between the researcher and her colleague the formula suggested by Tawney and Gast (1984) was used and the percentage was found to be %88.

$$\frac{\text{The number of agreements}}{\text{The number of agreements + disagreements}} \times 100$$

For the qualitative analysis of the study, the focus of the researcher was the High- Order Questions. The aim was to find out whether the teachers only ask the questions in the chapter or whether they ask extra High- Order Questions which are not included in the chapter. The researcher tried to identify in what kind of situations the teachers ask High- Order questions and also she tried to find out the aim of the teachers in asking those questions based on Syque's (2005) classification.

3.6. Conclusion

This chapter provided information about the participants, the way the data was collected and data analysis procedures. In the next chapter, detailed information will be provided about the data analysis procedures.

CHAPTER IV: RESULTS AND DISCUSSION

4.1. Introduction

The current study aimed at investigating the types of questions teachers asked in Listening/ Speaking classes, and finding out whether the questions that the teachers asked have the function of leading students to critical thinking. The question types were identified and categorized according to Todd's (1997) classification.

Video- recordings were used as the source of the data. The classes of eight teachers were recorded for eight class hours, during a week in the Listening/ Speaking course. In order to answer the research questions, the data was analyzed both quantitatively and qualitatively.

4.2. The questions asked by the teachers

In order to answer the first research question a quantitative analysis was carried out. The total amount of utterances for each teacher was counted. Every new start of a speaker was accepted as a new utterance. Out of this whole, the questions were counted separately (see Table 2), and the questions were classified as Echoic, Epistemic, and High- Order Questions (see Table 3).

Table 2 The Distribution of Utterances and Questions of the Teachers

TEACHER	QUESTIONS		OTHER TYPES		UTTERANCES IN TOTAL	
	n	%	n	%	n	%
NS (D)	421	22	1479	78	1900	100
NNS (F)	533	24	1722	76	2255	100
NNS (G)	349	26	997	74	1346	100

The number of the utterances that the first teacher (D) who was a native speaker with eight years of teaching experience performed during the Listening/Speaking course was counted as 1900. Out of this number 421 (22%) were calculated as question forms by the researcher and her colleague. The number of utterances that the second teacher (F) who was a nonnative speaker with eight years of teaching experience performed during the Listening/Speaking course was counted as 2255. 533 (24%) out of 2255 were the question forms. For the third teacher (G) who was a nonnative speaker with two years of teaching experience, the number of the utterances that she performed during the Listening/Speaking course was 1346. Out of this number 349 (26%) were the question forms. Other types included orders, instructions, explanations, requests, and recasts.

It can be concluded from Table 2 that the percentages of the questions asked by the teachers participated in this study seem to be close to each other. However, when the percentages of the questions are compared with the percentages of the other types, it is seen that the teachers asked lower amount of questions.

Table 3 Types of Questions Asked by the Teachers

TEACHER	ECHOIC		LOW- ORDER (EPISTEMIC)				HIGH- ORDER		TOTAL	
			Display		Referential					
	n	%	n	%	n	%	n	%	n	%
NS (D)	89	21	176	42	106	25	50	12	421	100
NNS (F)	75	14	259	49	140	26	59	11	533	100
NNS (G)	34	10	210	60	76	22	29	8	349	100

In terms of the first teacher (D) who was a native speaker with eight years of teaching experience, 421 questions were asked in total. 89 (21%) of those questions were classified as Echoic questions. In other words, those questions were asked for comprehension, confirmation, and clarification as defined by Todd (1990). 176 (42%) of these questions functioned as Display questions. 106 (25%) functioned as Referential questions. These display and referential questions are defined as Epistemic (Low- Order) questions by Todd (1990). For the last classification, High- Order Questions, there were 50 (12%) of the total number. In other words, 50 (12%) of the first teacher's questions were High- Order questions which guided students to think, analyze, and synthesize.

As for the second teacher (F) who was a nonnative speaker with eight years of teaching experience, 533 questions were asked in total. 75 (14%) of those questions were classified as Echoic questions. 259 (49%) functioned as Display questions. 140 (26%) of them functioned as Referential questions. 59 (11%) of this total number of questions were High- Order questions. 59 (11%) of the questions asked by the second teacher were High- Order questions which expected students to think, analyze, and synthesize.

In terms of the third teacher who was a nonnative speaker with two years of teaching experience, 349 questions were asked in total. 34 (10%) of those questions were classified as Echoic questions. 210 (60%) of the total number functioned as Display questions. 76 (22%) were Referential questions. For the last classification, High- Order Questions, the result was 29 (8%). In other words, 29 (8%) of the questions the third teacher asked were High- Order questions.

When we consider the questions asked by the teachers according to Table 3, we see that the greater percentage of the total belongs to the display questions. The first teacher (D) asked 42% (176) display questions. The second teacher (F) asked 49% (259) display questions. The third teacher on the other hand (G) asked 60% (210) display questions. Crookes and Choudron (1991, cited in Todd, 1997) state that the reason for asking more display questions in classrooms can be because of the classroom setting. They mention that classrooms are different from real- life environment that is why, according to the Crookes and Choudron, teachers ask more display questions. Another reason for asking more display questions is stated by Crookes and Choudron (1991, cited in Todd, 1997) as both

the teacher and the students may feel more comfortable if immediate feedback or response is provided, which is generally more practicable with display questions. In other words, the teachers may feel themselves more comfortable when they ask questions for which they already know the answer.

In terms of Echoic questions, it is clear that the first teacher asked the greatest amount of Echoic questions (21%) compared with the other teachers. The reason for this may be that teacher's being a native speaker. As in their research, Long and Sato (1983, cited in Todd, 1997) stated that native speakers use more comprehension checks when talking to non- native speakers. This may be the reason for the first teacher to ask more Echoic questions in this study.

When the questions asked in total by the three teachers are compared, it can be said concluded from the table that the third teacher who was a nonnative speaker with two years of teaching experience asked fewer questions. It can be interpreted that she asked the question and let her students do the tasks, which means that she only guided the students and give them more chance to speak among each other. For instance, while doing the activity about Solving a Science problem, she wanted her students to rank the items from the most important one to the leas important, then she wanted them to work in groups and decide on the items again and make another list. This shows that, she guides the students and gives them chance to speak, which means she acts as a facilitator.

Some examples of the questions asked by the teachers are given in table 4.

TABLE 7. EXAMPLES OF DIFFICULT QUESTIONS

Question Types	Teacher 1	Teacher 2	Teacher 3
Echoic	(95) Have you ever done anything strange during that time? (continues reading) OK? So, all these questions, all right.= Start with the first question and go on with the rest, OK?	88) This kind of things, this kind of areas, so we call them Frontier, right? 174) And you'll circle voiced and you'll put a slash on the voiceless sound, OK. Is it clear?	120) Space program is all all theoretical kind of project. Is there life on earth, such kind of....you know research, all the things. So, are we clear now?
Epistemic	Does the weather effect you? For example, if the weather is rainy #3 (sec) how do you feel? 126) AIDS day, when is it celebrated? 74) If I stay at a hotel in Ankara, what am I?	299) Would you like to be an astronaut? 337) Would you like to live in space if you have the chance? 229) Are you interested in space? 130) Do you know Aleksey Levov ?	45) So, how do you like full moon? 48) Is there anyone in the class with the idea that we are effected by full moon?
High- Order	111) But why would you like to go to space? 129) So, why has AIDS become a serious problem nowadays? 363) So, what do you think hannened after that?	33) Space is a new Frontier for us. Why? 213) We send satellite to space. What is the reason for it? 303) Why doesn't Turkey exnlore space?	100) Why do you think they are looking at the sky? 266) Why do you think the contest did not work in Turkey?

4.3. Functions of the High- Order Questions

In this current study, questions which function as High- Order Questions were the main focus.

In order to answer the first research question, the aim of the researcher was to find out whether the teachers ask High- Order questions in general. According to Table 3, it can be concluded that although the amount of the High- Order questions is low, still it can be said that the teachers ask questions which lead students to think, analyze, and synthesize. Besides finding the proportion of the High- Order questions asked by the teachers, the researcher also tried to find out whether the teachers ask extra High- Order questions. The results revealed that the teachers asked High- Order questions which were not included in the chapter. Those questions were analyzed and their percentages were given in the following table.

Table 5 Number of High- Order Questions Included in the Chapter

TEACHER	HIGH-ORDER QUESTIONS ASKED FROM THE BOOK		EXTRA HIGH-ORDER QUESTIONS ASKED BY THE TEACHERS		HIGH-ORDER QUESTIONS ASKED IN TOTAL	
	n	%	n	%	n	%
NS (D)	5	10	45	90	50	100
NNS (F)	15	25	44	75	59	100
NNS (G)	4	14	25	86	29	100

According to the table given above, it can be seen that 10% (5) of the first teacher's High- Order questions are from the book. 90% (45) of the questions were asked by the teacher himself. 25% (15) of the questions asked by the second teacher are from the book. 75% (44) of those questions were asked by the teacher herself. And 14% (4) of the third teacher's questions are from the book, while 86% (25) of those questions were asked by the teacher herself.

It can be concluded that the first teacher (D) and the third teacher (G) were less bound to the book compared to the second teacher (F). In other words, the first and the third teacher asked more High- Order questions which were not included in the book.

As for the second research question, the researcher tried to find out the functions of the questions asked by the teachers based on Syque's (2002) categorization. To answer the second research question, the researcher analyzed the activities included in the chapter. She tried to find out in what kind of situations the teachers ask the High- Order questions and also she tried to find out their functions. The following part will give some information about the questions which were included in the chapter and their functions were stated.

From the chapter explained before (cf. 42), it can be seen that some activities in the chapter already include High- Order type of questions.

As for those questions, in Part 1 the following questions take place: "*What are the advantages and disadvantages of space exploration?*" and "*What is an advantage of living in a space colony?*" Both of the questions take place as pre-listening questions in the chapter. According to Syque (2002) those questions function as *Questioning Viewpoints and Perspectives* since the question need students to evaluate their personal ideas and explain their ideas accordingly. The two questions are directly related with their own thoughts because with the help of those questions students are expected to evaluate their ideas of the advantages and disadvantages of space exploration and living in a space colony. The other question in the chapter is included in the activity which is about Solving a Science Problem. In this activity students are asked to take some items for their spaceship. They are asked to rank the items from the most important one to the least important besides they are asked to explain their reasons. The answers of that activity will change from one student to another and their reasons will change

accordingly. The students are expected to evaluate the items, to decide on the most and least important ones and they are also expected to state their reasons, which are related with the critically thinking process. In other words, they should decide why one item is better than the other item, which means that they are asked to explain their viewpoints and this is related with Syque's (2002) function of *Questioning Viewpoints and Perspectives*. Part 2, which is about "Listening to Lectures", includes some pre- listening questions and the two of which are High- Order questions. The first pre- listening question is as follows: "*To your knowledge, what effect does the moon have on the physical environment (e.g., the weather, the tides, animals)?*" And the third question of the same pre- listening activity: "*Do you believe that a full moon can affect people's behavior?* The former questions are about the already existing knowledge of the students. They should think about the effects of the moon on people and they are expected to evaluate their thoughts. With the third question, the students are guided to state their personal ideas which can change from one student to another. Both of those questions have the function of *Questioning Viewpoints and Perspectives*. The last High- Order question included in the same part, Part 2, which is asked in the following way: "*Which speaker "won" the debate, in your view? Why?*" In order to answer that question, the students need to evaluate the information they heard from the text, they should state their personal opinion about the winner of the debate, and they should support their views based on the text. For this reason, this questions functions as *Probing Rationale, Reasons and Evidence*.

The following part will give some information about the questions asked by the teachers. In what stage of the lesson the teachers asked those questions and what the function of those questions were according to the classification of High-Order questions given by Syque (2002) is stated.

4.3.1. The High- Order Questions and their Functions Asked by the First Teacher

When the High- Order questions of the first teacher (D) were investigated, the results revealed that generally he asked questions which mainly functioned as *Questioning Viewpoints and Perspectives* of the students. 48% (24) of the questions were asked for this purpose, and those questions were mainly asked when the teacher was doing the activity about the game “Truth” or “Lie”. This activity asked students to tell a story about themselves which would be either true or lie. During the activity, the teacher told different stories about himself. From time to time, he stopped telling his story and asked questions which functioned as *Questioning Viewpoints and Perspectives* as in the following example:

T[>Ss] ; (329) So, we were in a big seat, first class #4 (sec) very comfortable+...So, I told her to sit next to the window #3 (sec) and I sat+/.

Ms11[<T] ; Koridor.

*T[>Ss] ; Aisle.= Very good. #4 (sec) **What do you think I asked her?***

A few [<T] ; Her name.

T[>Ss] ; Her name.

By asking that question, the teacher tried to ask for the personal ideas of the student, which can change from one student to student. Those kinds of questions are related with the students' imagination.

During the same activity, the first teacher (D) also asked 14% (7) High-Order type of questions which functioned as *Probing Implications and Consequences*. As it is mentioned above, while playing the game, the teacher stopped telling the story from time to time and asked questions about the ending of the story as in the following conversation:

T[>Ss] ; (109) Except my trousers, yeah (laugh). #7 (sec) No, #3 (sec) it was very very hot because the light went off and I was very hot.= Boiling.= Boiling.

#5 (sec) So, what do you think happened next?

Ms8 [<T] ; Then suddenly lights, işte+...

T[>Ms8] ; I wish. #4 (sec) No, it didn't.

Those questions are related with the imagination of the students. In order to answer that kind of questions, students need to make analysis with the events discussed before and should think about the possible follow-up steps. Still those answers will vary from one student to another.

38% (19) of the High-Order questions of the first teacher functioned as *Probing Rationale, Reasons, and Evidence*. Those questions were generally asked when talking about the pre-listening questions in Part 2 (see Appendix 1). Especially while talking about the special holidays and festivals celebrated during the full moon, the teacher started asking questions about the evil eye and about the lucky number of the students.

T[>Ms15] ; (394) When you carry it with you do you believe in it+...#4 (sec) Do you believe in it?

Ms15[<T] ; Yes.

T[>Ss] ; Also+/.

Ms3 [<T] ; But not evil eye #3 (sec) I carry card.

*T[>Ms3] ; What card?= Can I see it? (the students shows the card) **Why is it lucky for you?***

Ms3 [<T] ; (No answer) #5 (sec)

T[>Ss] ; OK, it is interesting.= There has to be a reason. #4 (sec) OK, so, you carry number+...

Ms3 [<T] ; 10

T[>Ms3] ; 10

Ms3 [<T] ; Yes.

T[>Ss] ; OK= Who believes+...#3 8sec) For example, if I play the loto #3 8sec) not in Turkey, when I go to England, #3 (sec) every week I put one pound on six numbers.= All right.= But I always play the number 25. #4 (sec) So, it must be important for me, Yes or No?

Some [<T] ; Why?

T[>Ss] ; I always choose number 25.= It must be important.= So+/.

A few [<T] ; (A few students say their favorite numbers)

*T [>Ms2] ; **Why is it your favorite number?***

Ms2 [<T] ; I like six+/.

T[>Ss] ; I like 25 because it is about my father. #3 (sec) It reminds me about when my father died.= For this reason, it is an important number.= That's all.

Ms1 [<T] ; I like 46.= In Turkey, #4 (sec) for 46 they say crazy+/.

T [>Fs4] ; You, what is your favorite number?

Fs4 [<T] ; (No answer) #5 (sec)

T[>Ss] ; Also who loves six? = I love six, too. #5 (sec) Aydın, what is your favorite number?

Ms16 [<T] ; Seven.

T[>Ms16] ; Why seven? = Can you tell us why?

Ms16 [<T] ; (No answer) #5 (sec)

T[>Ms16] ; But you have to have reason #2 (sec) yani. #3 (sec) You can't say+...#3 (sec) OK = Can we finish here? = Can you stop for a minute?

When the teacher asks the students to explain their reasons for having a specific idea, he tries to require students to think about those reasons and explain them.

4.3.2. The High-Order Questions and their Functions Asked by the Second Teacher

When the High- Order questions of the second teacher (F) were investigated, it was found that mainly she asked questions which functioned as *Questioning Viewpoint and Perspectives*. In other words, 54% (32) of her High- Order questions functioned as *Questioning Viewpoint and Perspectives*. In general the second teacher asked those questions during the warm- up session before starting

the chapter. She asked some questions about the title of the chapter as in the following conversation:

*T[>Ss] ; (14) Can you look at the title of Unit 9? #7 (sec) p:175.= Look at 175.
(Students open their books) The topic may be about you #3 (sec) I don't know.=
Do you know the word "Frontier?"*

Ss [<T] ; No.

*T[>Ss] ; New Frontiers. #3 (sec) **Do you have any idea?** #4 (sec)*

Ss [<T] ; (No answer) #6 (sec)

*T[>Ss] ; **Frontier?= What may it be?***

Fs1 [<T] ; Do something first.

T[>Fs1] ; To do something first. =OK= #3 (sec) To be first.

With the help of those questions students are guided to think about their points of views, which lead them to think.

Besides, the second teacher (F) asked questions which functioned as *Probing Rationale, Reasons, and Evidence*. 38% (22) of her questions functioned to probe rationale, reasons, and evidence. The teacher mainly asked those questions while talking about living in space and in space colonies in Part 1 before the listening session. The following questions can be given as examples:

T[>Ss] ; (335) So, #3 (sec) do you think #3 (sec) will we have to live in colonies in the future?

Ms6 [<T] ; No= Maybe

Fs4 [<T] ; Turkey stay.

T[>Ss] ; We will be able to do this.= Would you like to live in space if you have the chance?

All [<T] ; No+/.

*T[>Ss] ; **Why not?***

Ms2 [<T] ; Temporally.

*T[>Ms2] ; OK= Temporally yes you say.= If it is necessary #3 (sec) **Why don't you prefer to live there?** #6 (sec)*

Ss [<T] ; (No answer)

T[>Ss] ; OK= Everything is here.= But no 33 (sec) you will not be the only person in #4 (sec) space you will live in colony.

(Ss laugh)

Those questions asked by the teacher require students to express their personal ideas and state reasons for the specific answers. In order to answer those questions, students need to synthesize their views first and then they are expected to state them, which mean they should think in depth. The teacher also asked this type of questions which functioned as *Probing Rationale, Reasons, and Evidence* while doing the activity called "Solving a Science Problem". In this activity, the students are told that they are a member of a space crew but their spaceship has crash- landed on the moon. In order to go to the other spaceship, they need to walk for about two hundred miles. For this reason, they need to take only a limited number of items with them. During this activity, the teacher asked such questions:

T[>Ss] ; (177) Now #4 (sec) my questions #3 (sec) does a pistol work in space?

#8 (sec)

Ss [<T] ; (No answer)

T[>Ss] ; For everyone #5 (sec) I'm asking #4 (sec) does it work?

Ms?? [<T] ; I think it is more effective.

T[>Ms??] ; More effective?

Ms?? [<T] ; There is no sürtünme. (Students laugh)

*T[>Ms??] ; I don't know. #4 (sec) What about your ideas?#3 (sec) **Does it work in space? #4 (sec) the pestle #3 (sec) why not?***

Ss [<T] ; (No answer)

*T[>Ss] ; **Why won't it work in space?***

Ms?? [<T] ; Can't fire.

T[>Ms??] ; You can't fire it.= OK

After the teacher asks for the ideas of the students about the pestle's not working in space, she asks for the reasons and wants students to state the reasons according to their beliefs.

The last 8% (5) of the questions asked by the teacher functioned as *Probing Assumptions*. Those questions require students to verify their answers. After getting an answer from the students, the teacher asks for other alternatives. The teacher asked those questions in Part 2 while talking about the effects of the weather on the environment as in the following example:

T[>Ss] ; (9) If the weather is rainy 33 (sec) how do you feel?

Some [<T] ; Bad.

Some [<T] ; Romantic.

T[>Ss] ; Romantic.=OK= So, #3 (sec) Do you think the weather effect the people in different way?

Some [<T] ; Yes.

*T[>Ss] ; What #3 (sec) the weather may effect us? #4 (sec) **What may be the other things that are outside?***

Ms6 [<T] ; People

T[>Ms6] ; People may effect us, ok.

After talking about the effects of the weather, the teacher asks for other alternatives besides the weather, she tries to probe other answers related with the topic. In other words, the teacher tries to lead the students to verify their answers.

4.3.3. The High- Order Questions and their Functions Asked by the Third Teacher

When the High- Order Questions of the third teacher (G) were investigated, the results revealed that mainly she asked questions which have the function of *Questioning Viewpoints and Perspectives*. 44% (13) of the total 29 questions were asked for this purpose. Similar to the second teacher (F), the third teacher (G) asked those questions in the warm- up session before starting the chapter. She asked the following questions:

*T[>Ss] ; (92) OK. #3 (sec) **What are they looking at?** #5 (sec) **What do you think they are looking at?** #6 (sec) *Are they looking at the moon?* #4 (sec) *Are they**

looking at the forest?= OK #2 (sec) Who says forest? #6 (sec) Who says the moon?

Ms5 [<T] ; Sky hocam.

T[>Ss] ; Sky?#4 (sec) Why do you think they are looking at the sky?

Ms5 [<T] ; They see UFO.

T[>Ms5] ; Ahh. #4 (sec) I didn't expect that answer.

With the help of the first questions, “What are they looking at?” the teacher tries to question the students’ ideas. The answer that she can get from the students changes according to the students’ points of views. After getting an answer from a male student, the teacher asks another question during this conversation which functions as *Probing Rationale, Reasons, and Evidence* with the following question: “Why do you think they are looking at the sky?” The percentage of the questions which functioned as *Probing Rationale, Reasons, and Evidence* was 56% (16) in total. Those questions were also asked during another activity as in the conversation below:

*T[>Ss] ; (166) OK, which of the following largest cities has the worst air pollution?= It was D= Mexico City. #5 (sec) **why is that so?***

Ms1 [<T] ; I've read an article+...

Fs4 [<T] ; I saw a movie+...

*T[>Fs4] ; Movie+...Really? #4 (sec) **Do you know the reason?= Why Mexico City is worst in air pollution?***

A few [<T] ;People.

T[>Ss] ; People.= That is its people. #6 (sec) Yes.

For those questions the students are expected to answer by giving reasons. As in the conversation the students made use of an article that one of them read and from a movie that one of them watched. They evaluated this knowledge from the article and the movie and expressed the reasons, which required students to think in detail.

The third teacher (G) also asked questions which functioned as *Probing Rationale, Reasons, and Evidence* while talking about traveling to space in Part 1. The following question can be given as an example:

T[>Ss] ; (255) If you had the chance of #4 (sec) what #3 (sec) going to the moon #4 (sec) would you try it?

Fs2 [<T] ; No.

*T[>Fs2] ; **Why not?***

Fs2 [<T] ; Because I don't know where it is.

(Ss laugh)

In the following example, after getting an answer from the student, the teacher, by asking “Why not?” she wants the student to give reasons for the specific answer that she gets. In order to answer that question, the student should evaluate the idea that she has and state her reasons.

The following table summarizes the functions of the questions asked by each teacher and reveals their percentages.

Table 6 Functions of the High- Order Questions asked by the Teachers

T1 (D)						T2 (F)						T3 (G)			
Questioning Viewpoints and Perspectives		Probing Implications and Consequences		Probing Rationale, Reasons, and Evidence		Questioning Viewpoints and Perspectives		Probing Implications and Consequences		Probing Assumptions		Questioning Viewpoints and Perspectives		Probing Rationale, Reasons, and Evidence	
n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
24	48	7	14	19	38	32	54	22	38	5	8	13	44	16	56

Briefly, it can be concluded from the examples given above that the tasks or the activity types effect the questions that the teachers ask. Certain activities have High- Order questions, for example, the pre- listening questions in Part 1 and Part 2. Also the activity about Solving a Science Problem requires students to rank the items from the most important to the least important one, and the students are expected to explain their reasons for choosing those items and why they think they are very important. Moreover, for the lecture that the students listen, they also should decide about the winner of the debate and should explain the reasons why they think that specific side won the debate. While covering those activities, the teachers asked High-Order questions as they are stated in the book. However, there was another activity which was about Getting Meaning from Context in Part 1 (see Appendix 1). Here the students listen to five conversations and after each conversation they are asked a question recorded in the cassette. The questions are not written in the book. The three teachers checked the answers of the students but they did not ask follow- up questions after getting the correct answer. They could have asked for the clue the students caught which led them to the right

answer. Those questions have an important role in students' decisions since students need to make inference on certain information. It would be beneficial for the students to think about that kind of follow-up questions because with the help of those questions students will be given chance to think in depth, evaluate the information, analyze, and synthesize the situation and decide. Asking that kind of follow-up questions is important because for the Listening/Speaking course there is an objective set to develop students' critically thinking abilities. To achieve this aim, teachers should make use of every opportunity to ask such questions since questions are one of the tools that help students to lead to be thinkers. Briefly, it can be more beneficial for students when they are asked extra questions which the book does not include.

The activities and the questions stated in the book also seem to affect teachers' choice of questions. Teachers mainly tended to ask questions with the function of *Questioning Viewpoints and Perspectives* since the questions included in the book have that function.

Moreover, the way the teachers cover the activity also plays an important role on his/her choice of questions. As for the "True" or "Lie" activity, the first and third teachers themselves made up stories and shared it with their students, they stopped from time to time and asked questions about whether they were lying or not, or they asked questions about the ending of the story. On the other hand, the second teacher wanted the students to make up a story and tell that story to the class. After finishing telling the story, the teacher asked the rest of the class

to guess whether the story was true or not. In that way, the teacher did not have the opportunity to ask many questions.

4.4. Summary

This chapter presented the findings of the analysis of the data both quantitatively and qualitatively. The results revealed that teachers asked different types of questions in Listening/Speaking courses but paying attention to the questions which functioned as High- Order Questions, it can be said that, the percentage of those questions is not high.

CHAPTER V: CONCLUSION

5.1. Introduction

The role of the questions in classroom has been discussed since the time of Socrates. It is stated that appropriate teacher questions are important for students' cognitive and meta cognitive improvement and have an effect on students' responses in terms of their length and they also have a vital role in making students think, analyze, and give reasons for their answers. In other words, the questions can be considered as an effective tool in changing the students' role from being only passive listeners to active participants who think and express their ideas.

In the light of these views, this study investigated the types of questions teachers asked in Listening/Speaking classes to see whether they gave chance to the students to think, analyze, and express their idea that is to think critically by those questions.

5.2. Summary of the Study

As it is clear through the aim mentioned above, the study attempted to find answer to the following questions. First one is whether High- Order type of questions that had the function of leading students to critical thinking are asked. The second one is at which stages of the lesson the teachers asked High- Order questions and what the function of those questions were according to Syque's (2002) categorization.

In order to answer the research questions, three teachers teaching Listening/Speaking at Intermediate level were chosen based on their teaching experience and native language. As for the teachers participating in this study, the first teacher (D) had eight years of teaching experience and was a native speaker. The second teacher (F) was a nonnative speaker with eight years of teaching experience too. The last teacher (G) was a nonnative speaker with two years of teaching experience. The teachers were video- recorded for eight class hours during a week of Listening/Speaking course. The researcher did not attend the classes in order not to affect the students and the teachers. When the data was collected, the video- recordings were transcribed by the researcher by using the codes in Appendix 2. According to the transcribed data, the questions were counted but some utterances which functioned as orders, recast or rhetoric types were excluded from the study since they do not function as questions. In terms of the questions' categorization Todd's (1990) classification was taken for granted.

In order to answer the first research question, the questions were categorized and grouped as Echoic, Epistemic, and High- Order Questions. According to the findings, T1 asked 421 questions in total. 89 (21%) were Echoic, 176 (42%) were display, 106 (25%) were referential questions and 50 (12%) functioned as High- Order Questions. In other words, of the total questions, the first teacher asked 50 (12%) questions which guided students to think, analyze, and synthesize.

For T2, it was found that she asked 533 questions in total. 75 (14%) of them were Echoic, 259 (49%) were display 140 (26%) were referential and 59 (11%) were High- Order Questions. In other words, of the total questions, the second

teacher asked 59 (11%) questions which expected students to think, to make analysis and synthesis.

As for T3, the total number of the questions was 349. 34 (10%) of which functioned as Echoic, 210 (60%) display, 76 (22%) of those questions were referential and 29 (8%) of the questions were High- Order Questions. In other words, of the total questions, the third teacher asked 29 (8%) questions which required students to think, to make analysis and synthesis.

In order to answer the second research question, the data was analyzed to find out at what stages of the lesson the teachers asked High- Order questions and the researcher tried to find out the functions of those questions based on the classification of Syque (2002).

In terms of the High- Order questions, the first teacher mainly asked questions 48% (24) which had the function of *Questioning Viewpoints and Perspectives* according to Syque (2002). Most of those questions were asked during a game “Truth” or “Lie”. This activity asked students to tell a story about themselves which would be either true or lie. During the activity, the teacher told different stories about himself. From time to time he stopped telling his story and asked questions to *Questioning Viewpoints and Perspectives* of the students.

The first teacher (D) also asked 14% (7) High- Order questions which functioned as *Probing Implications and Consequences* while playing the same game “Truth” or “Lie”. As it is mentioned above, while playing the game, the

teacher stopped telling the story from time to time and asked questions about the ending of the story. The students tried to guess the next step that the teacher did.

Besides, the first teacher asked 38% (19) High- Order questions which functioned as *Probing Rationale, Reasons, and Evidence*. Those questions were generally asked during the pre- listening stage in Part 2 (see Appendix1). Especially while talking about the special holidays and festivals celebrated during the full moon, the teacher started asking questions about the evil eye and about the lucky number of the students.

When the High- Order questions of the second teacher (F) were investigated, it was found that mainly she asked questions which functioned as *Questioning Viewpoint and Perspectives*. In other words, 54% (32) of the questions functioned as *Questioning Viewpoint and Perspectives*. In general the second teacher asked those questions during the warm- up session before starting the chapter. She asked some questions about the title of the chapter.

Besides, the second teacher (F) asked questions which functioned as *Probing Rationale, Reasons, and Evidence*. 38% (22) of the questions were asked for this purpose. Mainly the teacher asked those questions while talking about living in space and in space colonies in Part 1 before the listening session.

The teacher also asked questions which functioned as *Probing Rationale, Reasons, and Evidence*. 8% (5) of the questions had that function and those questions were asked while doing the activity called” Solving a Science Problem”. This was a problem solving type of activity (see Appendix 1). The teacher asked for the students’ reasons for taking the specific items.

As for T3, when the High- Order Questions she asked were investigated, the results revealed that mainly she asked questions which have the function of *Questioning Viewpoints and Perspectives*. 44% (13) of the total High- Order questions were asked for this purpose. Similar to the second teacher (F), the third teacher (G) generally asked those questions in the warm- up session before starting the chapter.

Besides those questions, the third teacher also asked questions which functioned as *Probing Rationale, Reasons, and Evidence*. %56 (16) of the questions were asked for this purpose. Those questions were mainly asked while conducting the activity about Solving a Science Problem.

5.3. Conclusion

There were three teachers participating in the study, so with this limited number of participants, the results cannot be generalized. However, the study can be a clue or an initiation for further similar research studies which can be conducted with larger participants.

In terms of the findings, the results revealed that the number of High- Order questions asked in class is not high. The number can be increased by making use of every opportunity to ask that kind of questions.

It can be concluded that experience may be effective in the teachers' choice of questions since it was found that the number of the High- Order questions asked by more experienced teachers was higher than the novice teacher. Yet, the reason for this result may be the choice of activities of the novice teacher.

The limited number of questions that the teachers asked in the classes may be due to the text book used in class. Some teachers are more inclined to follow the book verbatim, so the limited number of High- Order questions in the book may also limit the teacher. In such cases supplementary materials to the book can be prepared.

Based on the results of the data analysis, it can also be interpreted that the way the teachers conducted the activities affected the choice of questions that the teachers asked. For instance, in whole class discussions or problem solving activities the teachers have chance to ask High- Order questions. However, in role plays or game like activities the chance of asking such questions may decrease. Although the nature of the tasks effected the questions that the teachers asked, still it can be said that tasks can be applied in such a way that questions that lead to critical thinking can be asked at least as a follow up. That is the teacher can find ways to adapt the activity to include High-Order questions.

To sum up, paying attention to having students who think, analyze, synthesize, reason, and state their reasons instead of passively accepting the information in class, teachers should be aware of their practices and should be more conscious since they are the ones who help the students develop both as language users and as critical thinkers.

5.4. Pedagogical Implications

The importance of the questioning skill is stated as a vital element in a classroom environment. Considering the role of the teacher in a classroom

environment and mainly the importance of the questions, it is certain that teachers need to pay attention to their teaching and questioning skills. If we, as teachers complain about having students who do not think, we should first focus on our teaching performances since we guide the students and facilitate their learning. Some teacher training programs are recommended that lead teachers to become more conscious about their questioning styles. QUILT is one of those programs as it is mentioned about it in Literature Review (cf. 35). With the help of those programs, the teachers can have the chance to improve themselves as effective questioners.

Besides those programs, some other workshops can be conducted to make teachers aware of this observable skill.

5.5. Further Research

Some suggestions for further research can be as follows. First of all, the number of the teachers who participated in the study can be increased, which will be more effective in generalizing the results.

Second, after recording the teachers, immediate interviews can be held, which will not only help to identify the question types more effectively but also will shed light to teachers' choices more explicitly.

Besides these, teachers may be asked to keep diaries in which they will describe the things they do in class and over those diaries some interviews can be conducted as a retrospection session so that more in depth study will be possible.

References

- Açıkgöz, K.(2002). *Aktif Öğrenme*. Eğitim Dünyası İzmir
- Brain, M. (1998). *Emphasis on Teaching. The Importance of Questions*.
Retrieved October,24,2005 from <http://www.bygub.com/eot/eot2.htm>
- Brookfield, D. S. (1987). *Developing Critical Thinkers*. Jossey-Bass Publishers United States
- Brualdi, Amy C. (1998). *Classroom Questions. Eric/AE Digest*
Retrieved August,30,2006 from <http://www.ericdigest.org/1992-2/questions.htm>
- Carr, Kathryn S. (1990). *How Can We Teach Critical Thinking?Eric Digest*. Retrieved October,24,2005 from <http://www.ericdigest.org/pre-9218/critical.htm>
- Cotton, K. (1991). *Teaching Thinking Skills*. Retrieved July,08,2006 from
[file:///c:/Documents%20and%20Settings/Porsuk/Desktop/cu11\[1\].html](file:///c:/Documents%20and%20Settings/Porsuk/Desktop/cu11[1].html)
- Cotton, K.(2001). *School Improvement Research Series. Classroom Questioning*.
Retrieved October,12,2005 from
<http://64.233.183.104/search?cache:rxBTzH8KSEJ:www.nwrel.org/scpd/sirs/3/cu...>
- Critical Thinking Cooperation (2006). *Why Teach Critical Thinking?* Retrieved December,05,2006 from
<http://www.criticalthinking.com/campany/articles/critical-thinking-skills.jsp>
- Cueso, J. (.....). *Questions that Promote Deeper Thinking*.
Retrieved June 10, 2006
from <http://www.onecourseworkshop.com/learning030.htm>
- Cundale, N.(2001). *What We Preach? Stated Beliefs about Communicative Language Teaching and Classroom Questioning Strategies*

Retrieved October,05,2005 from
http://64.233.183.104/search?cache:kxD_a3VMqPsJ:www.jalt_publicaitons.org/tlt/..

Doğanay, A. (2000). *Yaratıcı Öğrenme*. Ankara Eğitim Sen Yayınları

Dashwood, A. (2005). *Alternatives to Questioning: Teacher Role in Classroom*.

Diestler, S. (2005). *Becoming a Critical Thinker*. Pearson Education New Jersey

Elder, L. And Paul, R. (2005). *The Miniatur Guide to Art of Asking Essential Questions*. Prentice Hall New Jersey

Fasko, D. Jr. (2003). *Critical Thinking and Reasoning: Current research, theory and practice*. Hampton Press.

Farooq, U. M.(1998). *Analyzing teacher's questioning strategies, feedback and learners' outcomes*.

Foundation for Critical Thinking (2004). *The Role of Socratic Questioning in Thinking, Teaching, & Learning*.

Retrieved August,08,2006 from
http://www.criticalthinking.org/resources/articles/the_role-socratic-questioning-tt.shtml

Gabrielatos, C.(2001). *A Question of Function. Teacher Questions in the EFL +...classroom*.

Retrieved October,12,2005 from
<http://72.14.207.104/search?cache:uSaOuGqRCe0J:www.gabrielatos.com/TQ.pdf>

Halvorsen, A. (2005). *Incorporating Critical Thinking Skills Development into ESL/EFL Courses*.

Retrieved June,10,2006 from
<http://iteslj.org/Techniques/Halvorsen-CriticalThinking.html>

Hirose, S. (1992). *Critical Thinking in Community Collages*. ERIC Digest

Retrieved August,30,2006 from <http://www.ericdigest.org/1992-2/critical.htm>

- Huitt, W. (1998). *Critical Thinking: An Overview*. *Educational Psychology Interactive*. Retrieved June,10,2006 from <http://chiron.valdosta.edu/whuitt/cd/cogsys/critthnk.html>
- Jones, D. (1996). *Critical Thinking in an Online World*. Retrieved January,23,2004 from <http://www.google.com.tr/search?q=cache:uNxLwGMK3p8J:www.library.uscb.edu/u...>
- Kabilan, Muhammed, K. (2000). *Creative and Critical Thinking In Classrooms*. Retrieved December,08,2005 from file://C:/Documents and Settings/EROL KILINC/Desktop/kadir/Kabilan_creative an...
- Karen I. Adsit, E. (1997). *Teaching Critical Thinking Skills*. Retrieved Junet,10,2006 from <http://academic.udayton.edu/Legaled/CTSkills/CTskills01.htm>
- Karron G. Lewis (2005). *Developing Questioning Skills*.
- Kerka, S. (1992). *High Order Thinking Skills in Vocational Education*. *ERIC Digest No.127* Retrieved August,30,2006 from [http://www.ericdigest.org/1992-1\(order.htm](http://www.ericdigest.org/1992-1(order.htm)
- Keng, L. Tock (1996). *Critical Thinking and Socratic Inquiry in the Classroom*. Retrieved November,15,2006 from <http://www.aare.edu.au/96pap/limtk96605.txt>
- King, A. (1995). *Promoting and Assessing Critical Thinking*.
- Kurfiss, J.G. (1988). *Critical Thinking: theory, research, practice, and possibilities*. Washington, D.C: Assosiation for the Study of Higher Education.
- Kürüm, D. (2002). *Öğretmen Adaylarının Eleştirel Düşünme Gücü*. Yüksek Lisans Tezi
- Maley, A(2003). *Teaching English with minimal researches*. Retrieved May,14, 2005 from http://www.onestopenglish.com/teaching_minimal_resources/minimal_maly.htm

Morino Institute (2001). *The Art of Asking Good Questions* Retrieved October,12, 2005 from <http://www.youthlearn.org/learning/teaching/questions.asp>
 Moritoshi, P.(2002). *Teacher questioning, modification and feedback behaviors and their implications for learner production: an action research case study.*

Myhill, D.,& Dunkin, F. (2002). *Literacy Today. What is a good Question.*
 Retrieved October,12, 2005 from <http://72.14.207.104/search?cache:SHR5Urb4gAJ:www.literacytrust.org.uk/Pubs/...>

Ngeow, K and Kong, Yoo S. (2003). *Learning through Discussion: Designing Tasks for Critical Inquiry and Reflective Learning. ERIC Digest*
 Retrieved August,30,2006 from <http://www.ericdigest.org/2004-1/tasks.htm>

Nunan, D.(1989). *Understanding Language Classroom.*
 Hemel Hemstead,
 Herts: Prentice Hall. Hemstead, Herts: Prentice Hall.

Nunan, D.(1991). *Language Teaching Methodology.*
 Hemel Hemstead, Herts: Prentice Hall.

Oberli, C.(2003). *Questioning and Feedback in the Interactive Classroom: Exploring Strategies*

Ong, C.A.(?). *Infusing Thinking into Currucium Content.*
 Retrieved November,15,2006 from [7 http://www.aare.edu.au/00pap/ong/00466.htm](http://www.aare.edu.au/00pap/ong/00466.htm)

Orlitsky, S.(1997). *Questioning and Understanding to Improve Learning and Thinking (QUILT)*
 Retrieved October,24,2005 from <http://www.ed.gov/pubs/Triadandtrue/quest.html>

Paul, R. And Elder, L. (2001). *Critical Thinking.* Prentice Hall New Jersey

Potts, B. (1994). *Strategies for Teaching Critical Thinking*. ERIC/AE Digest
Retrieved August,30,2006 from
<http://www.ericdigest.org/1996-1/critical.htm>

Profetto, J., McGrath, Smith, K.B., Rene A.Day and Yonge, O. (2004).
The Questioning Skills of Tutors and students in a context based baccalaureate nursing program
Retrieved
December,18,2006 from
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WNX-4CGM8DB-...

Rathawan,S.,Suzanne,L.,Dhanan,C.,Paul,D.R. (2003).
Thai University EFL Learners' Oral Responses to Various Spoken
Question Types

Reed, J.(1998). *Effect of a Model for Critical Thinking on Student Achievement in Primary Source Document Analysis and Interpretation, Argumentative Reasoning, Critical Thinking Dispositions and History Content in Community College History Course*. Retrieved November,15,2006 from <http://www.criticalthinking.org/aboutCT/Research.shtml>

Scales, A.M., & Shen, L.-B. (2004). *An investigation of Questions in McGuffey's second readers*. *Reading Online*, 7(6).
Retrieved October,12,2005 from
<http://63.233.183.104/search?cache:mqEF28BIG4sJ:www.readingonline.org/article...>

Schaferman, Steven, D. (1991). *An Introduction to Critical Thinking*. Retrieved June,10,2006 from
<http://www.freeinquiry.com/critical-thinking.html>

Schiller, P. (2001). *Strategies for Developing High Level Thinking*.
Retrieved November,11, 2005 from
<http://www.literacyconnections.com/Schiller.html>

Shomoossi, N.(2004). *The effect of Teachers' QuestioningBehavior on EFL Classroom Interaction: A Classroom Research Study*. *The Reading Matrix Vol. 4, No.2*

Sönmez, V.(2001). *Program Geliştirmede Öğretmen El Kitabı*. Anı Yayıncılık Ankara

Sunda, R. (2003). *Thinking About Thinking. Learning and Leading with Technology Vol: 30 N:5*

Suter, C. (2001). *Exploring Teachers' Questions and Feedback*. University of Birmingham.

Syque (2002). *Socratic Questions*. Retrieved July,08,2006 from file//c:/Documents%20and%20Settings/Porsuk/Desktop/socratic-questions[1].thm

Tama, Carrol M. (1989). *Critical Thinking: Promoting it in the Classroom*. Eric Clearinghouse on Reading and Communication Skills Bloomington IN. Retrieved June 10, 2006 from <http://www.ericdigest.org/pre-9211/critical.htm>

Thoms, Karen J.(2004). *Critical Thinking Requires Critical Questioning*. Retrieved November,15,2006 from <http://teaching.uchicago.edu/pod/thoms.html>

Todd, R. W. (1997). *Classroom Teaching Strategies*. G.B., Prentice Hall.

Tawney,J. W. and Gast, D. L. (1984). *Effects of different play structures on social interactions*. Retrieved Mach,12,2007 from [http:// findarticles.com/p/articles/mi_qa3903/is_200007/ai_n8926664/pg_7](http://findarticles.com/p/articles/mi_qa3903/is_200007/ai_n8926664/pg_7)

Wilson, O. Leslie. (1997). *Newer Views of Learning-Types of Questions*. Retrieved November,17,2005 from <http://www.eltnewsletter.com/back/June2000/art192000.shtml>

Yamazaki, F. (1998). *An Interaction Analysis: A Teacher's Questions, feedback, and Students' Production Through Classroom Observation*.

Yang, Ya-Ting C., Newby, Timothy J., Bill, Robert L. (2005).
*Using Socratic Questioning to Promote Critical Thinking Skills Through
Asynchronous Discussion Forums in Distance
Learning Environments*. Retrieved November, 15, 2006 from
<http://www.leaonline.com/doi/abs/10.1207/s15389286ajde1903>

APPENDIXES

Appendix 1. Unit 9 “New Frontiers”

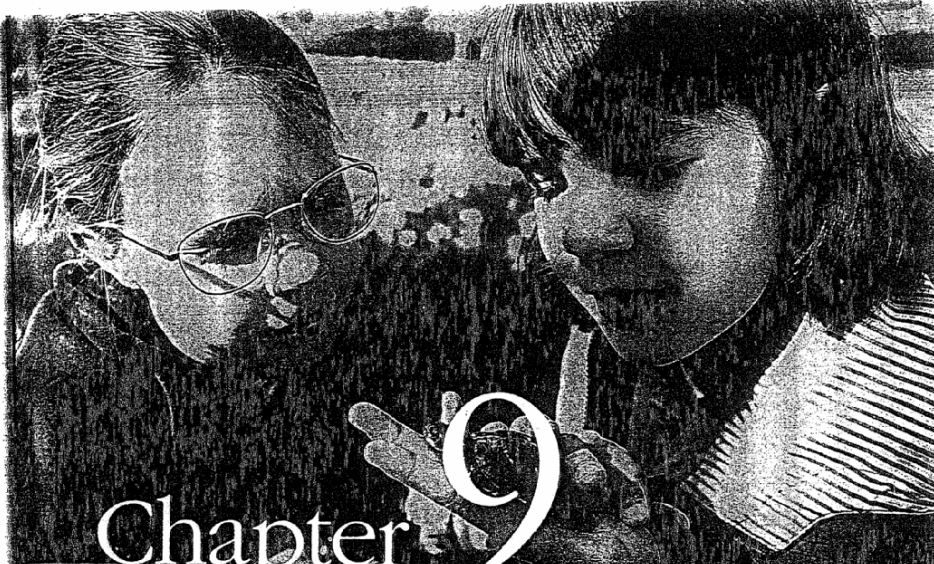
Appendix 2. Transcription Conventions Codes

Appendix 3. Transcripts of Teacher 1

Appendix 4. Transcripts of Teacher 2

Appendix 5. Transcripts of Teacher 3

APPENDIX 1



Chapter 9

New Frontiers

IN THIS CHAPTER

- Lecture:** The Moon's Effect on Human Behavior
- Note-Taking Focus:** Supporting a Position with Evidence
- Pronunciation:** Pronunciation of the /th/ Sound
- Focused Listening:** -ed Endings
- Using Language:** Introducing Surprising Information
Expressing Interest or Surprise

Did You Know?

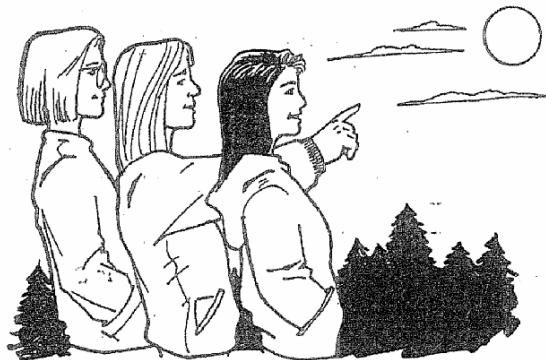
- The first person to walk on the moon was Neil Armstrong (USA). His historic walk took place on July 24, 1969.
- Alfred Nobel, the Swedish inventor who invented dynamite in 1866, created an organization to give awards each year to people who help the world. These awards are the Nobel Prizes for physics, chemistry, physiology, medicine, literature, and peace.
- In a survey about space travel, 44% of Americans said they would want to travel in space if they had the chance. 54% of American men and 33% of American women said they believe there is intelligent life on other planets.¹
- The human immunodeficiency virus (HIV), which causes AIDS, was first identified in 1983.²

PART 1

Listening to Conversations

Before You Listen

In the following conversation Jeff, Nancy, and Anna talk about space exploration.



- 1 **Prelisting Questions.** Discuss these questions with your classmates.
1. What are the advantages and disadvantages of space exploration?
 2. If you had a chance to live in space, would you do it?

¹ *USA Today*, <<http://www.usatoday.com/snapshot/news/hsnap006.htm>>.

² *Guinness Book of World Records*.

- 2 Vocabulary Preview. The words on the left are used in the conversation. Match them with their definitions.

Words	Definitions
1. footprints	a. a settlement that people build in a new land or territory
2. disease	b. once each year
3. annual	c. referring to the sun
4. satellite	d. sickness, bad health
5. gravity	e. the force that pulls everything toward the center of the earth
6. pollution	f. the shapes left on the ground after a person has walked on it
7. colony	g. dirt in the air or water
8. solar	h. a natural or artificial body that travels around a planet such as the earth
9. pioneer	i. the first person to find, do, or create something important (e.g., a new land or a new medical procedure)

Listen



3 Listening for Main Ideas.

- Close your book as you listen to the conversation. Listen for the answers to these questions.
 - What benefits of the space program did Nancy and Jeff mention?
 - What is an advantage of living in a space colony?
 - What is a pioneer? Can you give any examples?
- Compare answers with a partner.

Stress



4 Listening for Stressed Words.

- Now listen to part of the conversation again. Some of the stressed words are missing. During each pause, repeat the phrase or sentence; then fill in the missing stressed words.

Jeff: Anna! Nancy! Come out to the _____! You've got to see this _____!

Nancy: _____! Look how big and _____ it is!

Anna: It looks as if you could reach out and _____ it.

Jeff: Do you _____ that it's been more than _____ years since the first _____ walked on the moon? And would you believe their _____ are still there?

Anna: Really? How _____?

Jeff: There's no _____ on the moon, so there's no wind to blow them away.

Anna: That's _____. But you know, I've always _____ why some governments spend so much _____ on space exploration. I mean, there are so many _____ problems on earth, like _____, hunger, disease...

Nancy: Well, you may be _____ to know that the _____ spends less than _____ percent of its annual budget on the space program. And _____, you have to consider the technological and scientific _____ of space exploration.

Anna: Like what?

Jeff: Well, to give just one example, _____ were invented only about _____ years ago, and now they're used for _____ prediction, _____ phones, satellite TV...

Nancy: Also, a lot of _____ discoveries have come out of space research. _____ it or not, that's how soft _____ lenses were developed. Also, some _____ can be produced more _____ and cheaply in space, where there's no _____.

Jeff: Just _____—pretty soon we'll be able to buy _____ labeled "Made in Space" instead of "Made in Indonesia" or "Made in the USA."

2. Compare answers and read the conversation with a partner. Pay attention to the stressed words.

After You Listen



5

Vocabulary Review. These questions use the vocabulary from this section. Answer the questions with a partner and see how much you know. (The answers are on page 275, but don't look now!)

- Which of the following bodies has the strongest force of gravity?
 - Earth
 - Mars
 - the sun
 - the moon
- In the United States, which of the following people has the highest annual salary?
 - a professional (NBA) basketball star
 - a brain surgeon
 - the president
 - a scientist working for the space program
- Which of the following animals has the largest footprint?
 - a camel
 - a grizzly bear
 - an elephant
 - a walrus
- What is the English name of a childhood disease in which the skin is covered with red spots?
 - pneumonia
 - chicken pox
 - influenza
 - hepatitis
- Which of the following is a natural satellite of the earth?
 - the sun
 - the moon
 - the stars
 - a space colony
- Which of the following countries was once a colony of Great Britain (England)?
 - The Philippines
 - Mozambique
 - The United States
 - Venezuela
- The Wright brothers were pioneers in the field of _____.
 - medicine
 - computers
 - biology
 - aviation
- Which of the following large cities has the worst air pollution?
 - Tokyo, Japan
 - Los Angeles, California, USA
 - Frankfurt, Germany
 - Mexico City, Mexico
- If you can use solar energy to make your food, you are probably a _____.
 - jellyfish
 - tree
 - bird
 - spider

Pronunciation

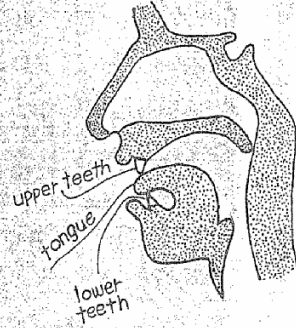


The /th/ Sound

The English language has two sounds that are written with the letters "th." The two sounds are almost the same, except that one of them is voiced, as in the word *there*, and the other is voiceless, as in the word *think*.

To pronounce both sounds, follow these steps:

1. Place the tip of your tongue between your top and bottom teeth. Keep your lips relaxed.
2. Hold your mouth in this position as you exhale air from your lungs.
3. Make your vocal cords vibrate as you exhale to produce the voiced /th/ sound.
4. Be sure to do steps 1 to 3 all at the same time.



- 6 **Pronouncing Voiced and Voiceless /th/.** Listen to two lists of words. The words in the first list have a voiceless /th/ sound. The words in the second list have the voiced sound. Repeat the words after the speaker.

voiceless /th/

think
thought
thumb
author
nothing
mouth
both
throat

voiced /th/

this
that
those
rather
other
father
breathe
smooth



- 7 **Distinguishing between Voiced and Voiceless /th/.** Now listen to the following sentences from the conversation. Repeat them after the speaker. Put a slash (/) through every voiceless /th/ you hear. Put a circle around every voiced /th/.

Examples: there think

1. Their footprints are still there.
2. There's no weather on the moon.
3. If the living conditions are the same as on earth, then why not?
4. Don't you think it would be exciting to be a pioneer? ...
5. What's that?
6. You know, someone who does something first.
7. I'm going to stay right here on earth and finish college.

Using Language

Introducing Surprising Information

Sometimes special phrases are used to introduce information that may be surprising or unexpected to the listener. The expressions below are used for introducing surprising information.

It's weird / strange / funny, but ...

Surprisingly

Oddly enough

8 Identifying Ways to Introduce Surprising Information. Read the tapescript of the conversation on pages 327 and 328 and fill in these blanks with the expressions that introduce surprising information. The answers are on page 275.

1. _____ that it's been more than 30 years since the first astronauts walked on the moon?
2. _____ their footprints are still there?
3. _____ that the United States spends less than one percent of its annual budget on the space program.
4. A lot of medical discoveries have come out of space research.
_____, that's how soft contact lenses were developed.
5. The article said that, _____, life in these communities might be even nicer than on earth because they'll be smaller, without the problems we have in big cities today.

9 Truth or Lie Game.

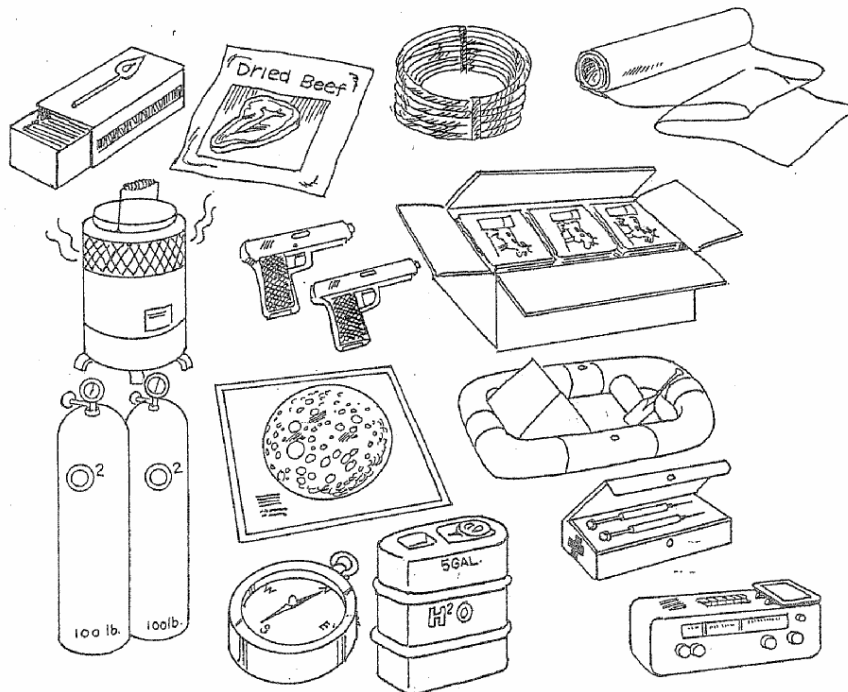
1. Your teacher will hand out a card to each student in the class. The card will say "truth" or "lie." Don't show your card to anyone.
2. Prepare to tell the class something surprising or unexpected about yourself. If your card says "truth," your story must be completely true. If it says "lie," you must make something up, but it should sound true.
3. Take turns telling your stories. When it is your turn, begin with one of the expressions for introducing surprising information. After you are finished, the teacher will ask the class to vote on whether you told the truth or not. Your purpose, of course, is to fool your classmates!



Talk It Over

Solving a Science Problem. Imagine you are a member of a space crew. Your spaceship has crash-landed on the lighted side of the moon. Another spaceship will pick you up about two hundred miles away. Because you will have to walk there, you can take only a limited number of items with you.

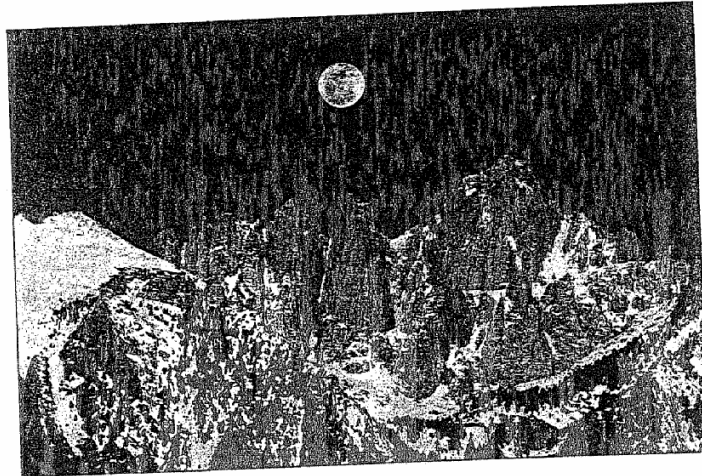
1. Below are 14 items your crew will have to choose from. Read the items and use your dictionary if necessary to understand their meanings.
2. Decide which items are the most important and which are the least important. Place the number "1" by the most important item, the number "2" by the second most important, and so on.
3. When you have finished, compare your rankings with those of your classmates. Explain the choices you made.



- | | |
|-----------------------------------|---|
| _____ box of matches | _____ two 100-pound tanks of oxygen |
| _____ dried food | _____ map of the moon's surface and rock formations |
| _____ 50 feet of nylon rope | _____ life raft |
| _____ parachute silk | _____ magnetic compass |
| _____ portable heating unit | _____ five gallons of water |
| _____ two pistols | _____ first aid kit containing injection needles |
| _____ one case of dehydrated milk | _____ solar-powered FM receiver-transmitter |

PART 2**Listening to Lectures****Before You Listen**

In this lecture two students have a debate about the effects of the moon on human behavior.



1 **Prelisting Discussion.** Discuss these questions in small groups.

1. To your knowledge, what effect does the moon have on the physical environment (e.g., the weather, the tides, animals)?
2. Does your culture have special festivals or holidays at the time of the full moon?
3. Do you believe that a full moon can affect people's behavior?
4. Do you feel or act differently when the moon is full? Have you ever done anything strange during that time?

- 2 **Vocabulary Preview.** The following terms appear in the lecture. With your classmates, define the words you already know. Mark the words you do not know.

_____ to regulate	_____ to commit suicide	_____ a hypothesis
_____ ocean tides	_____ poison	_____ proof
_____ unpredictable	_____ a mental hospital	_____ link
_____ loony	_____ weird	_____ a coincidence
_____ an assault	_____ to make up one's mind	

- 3 **Discussing Note-Taking Forms.** You are going to hear two students debate the following question: Does the full moon cause people to behave strangely? One student will argue in favor of the question, and the other will argue against it.

With your classmates, discuss different ways of setting up your page of notes. Draw them on the board.

Listen

Supporting a Position with Evidence

A debate is a formal argument between two speakers who have different opinions about a question or issue. In a debate, each speaker states a position and then tries to *prove* it with supporting *evidence* such as facts and statistics, quotations from experts, or references to other published works. The "winner" of a debate is the person who convinces the audience that he or she is right.

Information in a debate is normally organized from general to specific. The following paragraph illustrates this type of organization:

Americans watch too much television, and they watch too many violent programs. According to the *Los Angeles Tribune* of November 5, 1999, Americans spend an average of 2,300 hours per year watching TV. Thomas Lear, a psychiatrist at the University of Illinois, states in his book *Watching the Tube* that between 90 and 95 percent of all adult programs contain violence, "bad" language, or hostile sexual relations. Lear explains that when people see these behaviors repeated thousands of times, they start to think that such behaviors are normal and acceptable.

Here are sample notes for this paragraph. Notice that the supporting details are indented and numbered, and each piece of evidence is written on a separate line.

- A. Amer. watch too much TV & violent progs.
1. 2300 hrs/yr. (LA Tribune)
 2. 90-95% of progs. have violence, bad lg., hostile sex (T. Lear)



- 4 **Taking Notes on a Position and Supporting Evidence.** Listen to one position about the full moon and three pieces of supporting evidence. Take notes as in the example.

Dr. Lieber: _____

1. 1977: _____

2. 1980 study: _____

3. in mental hospitals: _____

Compare your notes with those of a classmate.



- 5 **Taking Draft Notes.** Listen to the lecture and take notes in the best way you can. Use your own paper. As you listen and take notes, refer to the two speakers' handouts shown here.

Joshua's handout

Is the Full Moon Associated with Violent or Self-Destructive Behavior in Humans? YES!

- 11,613 cases of aggravated assault in a five-year period: assaults occurred more often around the full moon. (1978)
- 34,318 crimes in a one-year period: crimes occurred more frequently during the full moon. (1976)
- 841 cases of "self-poisonings" in a four-year period: self-poisonings did occur more often on the day of the full moon. (1980)

Dana's handout

Is the Full Moon Associated with Violent or Self-Destructive Behavior in Humans? NO!

- 58,527 police arrests in a seven-year period: no difference in the number of arrests made during any phase of the moon. (1977)
- 361,580 calls for police assistance in a three-year period: no relationship to the phase of the moon. (1983)
- 1,289 aggressive "incidents" by hospitalized psychiatric patients in a 105-week period: no significant relationship between the severity or amount of violence/aggression and phase of the moon. (1998)
- The rate of agitation in 24 nursing home residents in a three-month period: no significant relationship to moon phase. (1989)
- 4,190 suicides in a 58-year period: suicides had no relationship to the phase of the moon. (1991)
- 3,468 emergency room visits and hospital admissions by people who intentionally took poison; visits and admissions were not different on days with full moons. (1983)
- 4,835 traffic accidents in a four-year period: no relationship to the phase of the moon. However, there was an increase in the number of accidents that occurred in the summer and on weekends. (1993)

After You Listen



6 **Outlining the Lecture.** Use your notes from Activities 4 and 5 to complete these outlines. Remember to use abbreviations and symbols. Listen again if necessary.

<p>Joshua: Full moon causes unusual behavior</p> <p>In English, "loony" = crazy < Latin <i>luna</i> (moon)</p> <p>I. Full moon → _____</p> <p style="margin-left: 20px;">A. 1977 book "The Lunar Effect" said _____</p> <p style="margin-left: 40px;">1. Ex.: woman tried to kill Gerald Ford</p> <p style="margin-left: 40px;">2. 2 research studies showed _____</p> <p style="margin-left: 40px;">3. _____</p> <p>II. _____ → _____</p> <p style="margin-left: 20px;">A. _____</p> <p style="margin-left: 40px;">1. 9 people jump off Gold. Gate Bridge</p> <p style="margin-left: 20px;">B. People who poison themselves _____</p> <p style="margin-left: 20px;">C. Wkrs. in mental hosp: patients more diff. during full moon</p>	<p>Dana: Full moon does NOT cause unusual behavior</p> <p>-No scientific support</p> <p>-Someone's opinion ≠ proof</p> <p>-20 studies show _____</p> <p>_____</p> <p>I. Studies show no relat. bet. behav. & full moon</p> <p style="margin-left: 20px;">A. Study of 60,000 arrests: _____</p> <p style="margin-left: 20px;">B. Studies of suicide:</p> <p style="margin-left: 40px;">1. 7 studies showed _____</p> <p style="margin-left: 40px;">_____</p> <p style="margin-left: 40px;">_____</p> <p style="margin-left: 40px;">2. Study of self-poisonings showed _____</p> <p style="margin-left: 40px;">_____</p> <p style="margin-left: 20px;">C. Studies in mental hospitals: _____</p> <p style="margin-left: 20px;">D. People in nursing homes: _____</p> <p style="margin-left: 20px;">E. Studies of people in emerg. rooms: _____</p>
---	--

III. Many prof. say moon has weird effect.	II. Conclusion: _____
Ex.: _____	_____
_____	_____
IV. Cause? _____	_____
_____	_____
_____	_____
_____	_____

7 Defining New Vocabulary. With a partner, look back at the words you marked as unknown in Activity 2 and discuss the meaning of each new term. Your teacher may ask you to write sentences with these new words.



8 Discussing the Lecture. Discuss the following questions about the lecture. Refer to your notes as necessary. Use the new vocabulary as you talk.

1. How does the full moon regulate the physical world?
2. What is the first speaker's hypothesis?
3. According to the first speaker, which behaviors may be caused by the full moon?
4. According to the second speaker, what is the difference between scientific proof and coincidence?
5. Which speaker "won" the debate, in your view? Why?
6. After listening to the two speakers, has your opinion about the effects of the full moon changed?



Talk It Over

Expressions for Citing Evidence. As you learned, one way to support a position is to give evidence from experts or scientific studies. Special verbs and phrases are used to cite (name) the *source* of the supporting evidence. These include:

- According to (*Time*)
- As (this study) shows
- Research shows that
- Dr. Baker points out / reports / states / explains

Debate. Now that you have heard a debate in English, you are ready to plan and conduct a debate in your class.

1. Choose one of these topics for your debate, or think of one of your own.

Topics

1. Should smoking be illegal in restaurants?
 2. Should governments spend money on space programs?
 3. Should college entrance examinations be abolished?
 4. Should voting in government elections be mandatory or voluntary?
 5. Should army service be required for women if it is required for men?
2. Divide the class into teams. One team will argue in favor of the question. The other will argue against the question.
 3. Work in pairs or small groups and make a list of arguments and facts you will use to support your position. If possible, find information and research to support your position. *Note:* Do *not* give your opinion. Remember that a debate is based on *facts*.
 4. Compare your supporting statements with other students who share your position. Modify or add to your supporting statements if necessary. Together, create one "master" page of supporting evidence to be used during the debate.
 5. Each side should select one person as its speaker. These two speakers should then debate the topic.
 6. The teacher will decide which side has "won" the debate.
 7. After the debate you may discuss your *real* opinion about the topic.

PART 3

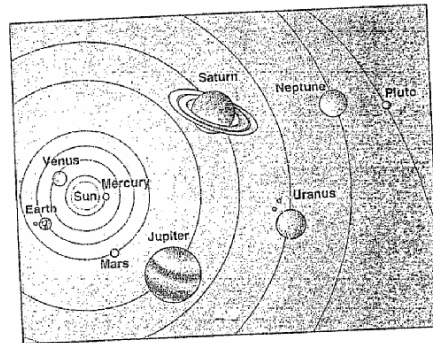
Focused Listening and Speaking

Getting Meaning from Context



1 Using Context Clues. You are going to hear five short talks about discoveries.

1. Listen to each talk.
 2. After each talk, you will hear a question. The tape or CD will pause.
 3. Read the answer choices and circle the letter of the best answer.
 1. a. Discoveries and inventions usually happen at the same time.
 - b. An invention helped Columbus to make an important discovery.
 - c. All discoveries depend on inventions.
 - d. Columbus invented ships because he hoped to discover a new land.
 2. a. It requires expensive technology.
 - b. It is very old.
 - c. It will decrease in the future.
 - d. It began in ancient Rome.
3. a. Uranus was discovered almost 2,000 years ago.
 - b. Telescopes were invented by the Romans.
 - c. Uranus was not named after a Roman god.
 - d. Sir William Herschel did not know about the discoveries of the Roman astronomers.



4. a. It was the greatest accomplishment of the ancient Chinese.
 - b. It led to improvements in people's health.
 - c. It was accidental.
 - d. It was a big mistake.
5. a. Columbus used rubber to build his boats.
 - b. Rubber comes from a tree.
 - c. "Rubber" was originally a French word.
 - d. Rubber was discovered in Europe.

- 2 Talking about Inventions and Discoveries. The following discoveries and inventions were discussed in Activity 1. What role, if any, do they play in your life?
1. solar energy
 2. the planets
 3. tea
 4. rubber

Focused Listening

Pronunciation of -ed Endings

The *-ed* ending is found on regular past tense verbs and the past participle. For example:

- We finished the work at 8 P.M. (Past tense verb)
- We're very excited about your visit. (Participle used as adjective)
- The papers were corrected by the TA. (Passive voice)

The *-ed* ending has three different pronunciations in English.

1. In words ending with /t/ or /d/, it is pronounced as a separate syllable, /id/.

Examples

wait; waited decide; decided

2. In words that end with a voiceless consonant, it is pronounced as /t/.

Examples

step; stepped wish; wished
talk; talked watch; watched

3. In words that end with a voiced consonant or a vowel, it is pronounced as /d/.

Examples

live; lived die; died
turn; turned use; used
enjoy; enjoyed call; called

- 3 Practicing the Past Tense Endings. Listen and repeat the following words after the speaker.

/t/	/d/	/id/
passed	discovered	directed
camped	jogged	wanted
crashed	agreed	started
looked	closed	
asked	breathed	



4 Distinguishing between Past Tense Endings. Listen to the following past tense verbs and check the pronunciation that you hear. You'll hear each word twice.

	/t/	/d/	/ɪd/
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			



5 Pronouncing the Past Tense Endings. With a partner, decide on the -ed pronunciation of these words. In the blanks write /t/, /d/, or /ɪd/. Then say the words.

- | | |
|-------------------|---------------------|
| 1. _____ pointed | 6. _____ waited |
| 2. _____ dreamed | 7. _____ explored |
| 3. _____ traveled | 8. _____ interested |
| 4. _____ kissed | 9. _____ judged |
| 5. _____ thanked | 10. _____ moved |

Using Language

Expressing Interest or Surprise

In Chapter 1, page 7, you learned several ways of showing that you are interested in what someone is saying. Here are some additional expressions you can use:

That's (really) interesting

That's an interesting / great / nice story.

If you are surprised by something you hear, you can say:

(That's) incredible!

(That's) unbelievable!

(That's) amazing!

I can't believe it.

I'm shocked.



- 6 **Talking about Discoveries.** We discover things that are already there, just waiting for us to find them. Most discoveries are quite ordinary. For example, think of a baby discovering his or her toes.

Work in small groups and tell your classmates about discoveries that you have made in your life. It may help you to think in terms of categories. Use expressions to express surprise, as appropriate, to respond to your classmates' comments.

Discoveries

Categories

A skill you found you have

A place

A new form of entertainment

Something you never noticed before about something familiar

Something unusual about another country or its people

Examples

the ability to sing, to make bread perfectly

a new restaurant, a vacation spot

jazz, bungee jumping

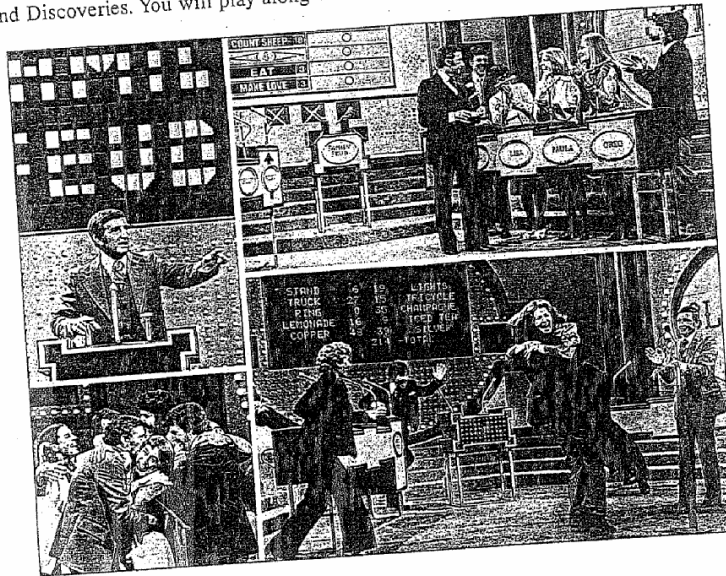
Your dog has different-colored eyes.

There is a funny noise in your house.

You cannot negotiate the prices of items in stores.

PART 4**Listening and Speaking
in the Real World**

In this section you are going to listen to a game show called Explorations, Inventions, and Discoveries. You will play along with the contestants on the tape.

**Before You Listen**

- 1 **Prelisting Questions.** Discuss the following questions with your classmates.
1. Are game shows popular in your community? Do you enjoy watching them?
 2. Do you enjoy watching English-language game shows? Which one(s) in particular?
 3. Are game shows different in different languages?
 4. Would you like to be a contestant on a game show? Which one?

Listen



- 2** **Listening to a Game Show.** You are going to listen to a game show with questions about explorations, inventions, and discoveries. As you hear each question, you should circle *your* answer in the column below marked Your Answer. Then you will hear the answer given by this week's contestant, Roger Johnson. Finally, the host, Ronnie Perez, will provide the correct answer. (Also found on page 275.)

Question	Your answer	Roger's answer
1	a. Apple b. Microsoft c. Intel	a. Apple b. Microsoft c. Intel
2	a. Mt. Everest in Nepal b. Mt. Fuji in Japan c. Mt. Whitney in the United States	a. Mt. Everest in Nepal b. Mt. Fuji in Japan c. Mt. Whitney in the United States
3	a. Spain b. Portugal c. Italy	a. Spain b. Portugal c. Italy
4	a. Christopher Columbus b. Leif Eriksson c. Ferdinand Magellan	a. Christopher Columbus b. Leif Eriksson c. Ferdinand Magellan
5	a. Italy b. Egypt c. China	a. Italy b. Egypt c. China
6	a. penicillin b. aspirin c. ginseng	a. penicillin b. aspirin c. ginseng
7	a. the motion picture b. the telephone c. the lightbulb	a. the motion picture b. the telephone c. the lightbulb
8	a. Isaac Newton b. Galileo Galilei c. Nicolaus Copernicus	a. Isaac Newton b. Galileo Galilei c. Nicolaus Copernicus

After You Listen

3 Reviewing the Listening.

1. How many questions did you answer correctly? Which student got the most correct answers?
2. Using the answers as cues, try to reconstruct the questions. Turn to page 275 to see if you are right.



Talk It Over

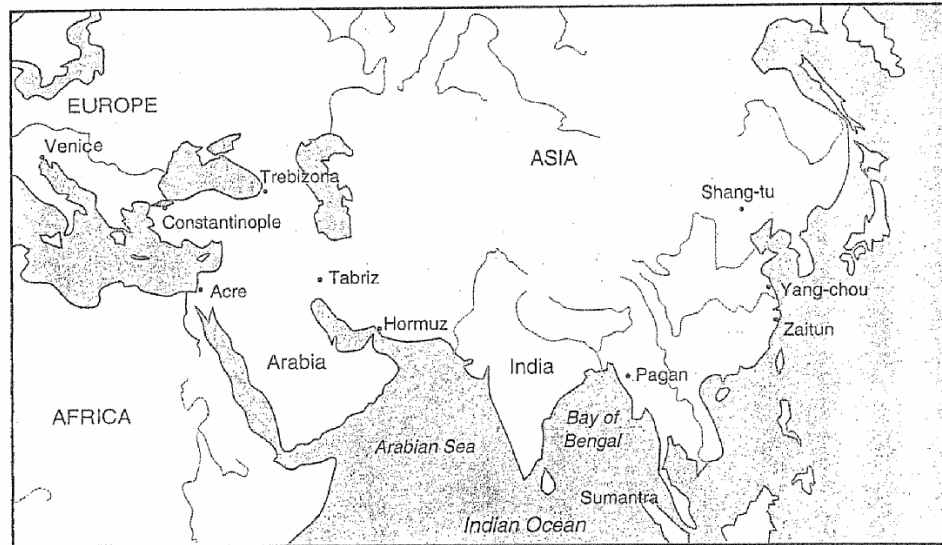
Ordering Events in a Story.

The Travels of Marco Polo

Marco Polo was born in Venice in the year 1254. With his father and uncle, he traveled to Asia and eventually reached China, where he met the famous emperor Kublai Khan. Late in his life Marco Polo spent some time in prison. There he wrote a book about his travels in Asia, which became a valued source of information about the lands of the East. Marco Polo died in 1324.

The following paragraphs give information about Marco Polo's travels. This information is not in the correct order. Your task will be to put the events in the correct sequence.

1. Divide into groups of seven students each, if possible.
2. Each person in the group should choose one of the paragraphs. (If your group has only six people, one person should select two paragraphs.)
3. Read your paragraph. If necessary, use a dictionary to understand all the important information. On the map, mark the part of Marco Polo's voyage that is described in your paragraph.
4. When everyone has finished preparing,
 - a. Listen to each person tell his or her part of the story. Use the map on page 197 for illustration as you speak. *Do not read your classmate's paragraphs.* If you do not understand something, ask for repetition or clarification.
 - b. Decide what the correct order of the story is.
 - c. Draw the missing parts of Marco Polo's voyage on your map. Using the map for illustration, explain your part of the story to the group.
5. Check the correct order on page 275.



Story

- A. The Polos finally left China in 1292. They sailed south from Yang-chou, through the Straits of Sumatra, and around the tip of India.
- B. More than three years after leaving Venice, they finally arrived at the palace of the emperor Kublai Khan in Shang-tu, China.
- C. Marco Polo, his father, and his uncle sailed on their famous voyage to the Orient in 1271. First they traveled to the port city of Acre in Palestine. From there they traveled by camel to the Persian port of Hormuz.
- D. They then sailed up the western coast of India and across the Arabian Sea, returning to the port of Hormuz. After that they traveled by land to Tabriz, Trebizona, and Constantinople.
- E. They arrived back in Venice in the year 1295 after traveling more than 15,000 miles.
- F. The Polos stayed in China for 17 years. During that time, Marco traveled to Southeast Asia and India and back. After that, he became a government official in the Chinese city of Yang-chou.
- G. They wanted to sail from Hormuz to China, but they could not find a ship. Therefore, they continued traveling by camel across the deserts and mountains of Asia.

APPENDIX 2

TRANSCRIPTION CONVENTIONS

- 1- (1.5) Numbers between parentheses indicate length of pauses in second and tenths of seconds.
- 2- (()) Material between double quotes provides extralinguistic information, e.g. about bodily movements.
- 3- so::: colons indicate the lengthening of the last second.
- 4- ?; A question mark instead of a name or initial indicates that no good guess could be made as to the identity of the speaker.
- 5- ??; Multiple question marks followed by semicolon indicate that the speaker's identity is not clear but there are reasons to believe that it is someone different from the last unidentified speaker.
- 6- # When there is a pause in the speech.
- 7- +/. When someone interrupt the speech.
- 8- [>] When talking together (The first speaker).
- 9- [<] When talking together (The second speaker).
- 10- X Incomprehensible item, one word only.
- 11- XX Incomprehensible item, of phrase length.
- 12- XXX Incomprehensible item, beyond the phrase length.
- 13- [//] Wrong word is used but it is corrected.
- 14- [/] Wrong word is used but it is not corrected.
- 15- ? Indicates a question.
- 16- = No gap between utterances.
- 17- () For uncertain transcription.
- 18- +... When the sentence is not completed.

Abbreviations:

MS	Male student	MS1	Male student numbered as one
FS	Female student	FM1	Female student numbered as one
MS?	Unidentified male student	T	Class teacher
MS??	Another unidentified male student	A FEW	2 or 3 students
SOME	More than 3, but not all	ALL	Apparently all, or at least most

APPENDIX 3
TAPESCRIPTEACHER 1

FIRST CLASS HOUR

EXTRACT 1: WARM- UP

T [>Ss] ; Ok= Right= Can you take a seat, please? #6 (sec)

(Students sit down)

T [> FS1] ; Can you shut up, please? #4 (sec) So, the second hour we'll discuss with the topic.= OK #5 (sec) Who told you to open the book?= Did I tell you to open the book?= Did I tell you?

Some [<T] ; Nooo.

T [>Ss] ; OK= Now= All right. #4 (sec) Before we start the unit #6 (sec) (to a student (Ms1)) please be quiet= All right #5 (sec) All right= Before we start this week's class #3 (sec) I have to ask you some general questions, clear? #5 (sec) All right #3 (sec) Which is the country where Nobel prizes are won? = Which is the country?

Ms1 [<T] ; Nobel?

T [>Ms1] ; Nobel prize.

Ms1 [<T] ; Nobel ödülü.

T [>Ss] ; What is the Nobel prize? +/-

Ms2 [<T] ; Sweden.

T [< Ms2] ; Good= Sweden= Yes #4 (sec) OK= Now, #4 (sec) this year, this year the literature prize, literature prize? = Who won literature prize? #5 (sec)

Ms3 [<T] ; John +...

T [>Ss] ; Who won the literature prize? #4 (sec) This is a bit of general knowledge. = Yes? #4 (sec) One of the prizes always goes to literature #4 (sec) medicine #6 (sec)

T [>Ms4] ; Please, can you stop playing with your dictionary? #3 (sec) Can you look at me please, yes? #4 (sec) Who won the literature prize? #6 (sec)

Ss [<T] ; (No answer)

T [>Ss] ; Ok= You do not know.= No problem. #4 (sec) It's Harold Ritter. #4 (sec) Yes, he's English. =And what is he famous for, Harold Ritter? #3 (sec) It's literature. =So, what is literature?

Ms2 [<T]; English.

T [>Ss]; What is Edebiyat in Turkish? #5 (sec) Edebiyat is literature. #4 (sec) So, Harold Ritter obviously you don't know because #4 (sec) you don't read a lot.= Am I right or wrong? #7 (sec)

Ss [<T]; (No answer)

T [>Ss]; Yeahhh= So, #3 (sec) Harold Ritter is a very popular play writer #4 (sec) so he write [/] what?= He writes+...

A few [<T]; Plays.

T [>Ss]; Plays.= Novels. #4 (sec) But he's more famous nowadays because he's very #4 (sec) anti American. #5 (sec) What happened these last year [/]?

A few [<T]; War.

T [>Ms2]; Yeah #3 (sec) Can you speak?= What happened this year? #6 (sec)

Ms2 [<T]; (No answer)

T [>Ss]; This last year. #4 (sec) There was a war.

A few [<T]; Yes.

T [>Ss]; Ohh= Good morning.= OK #3 (sec) There was the war.= In his speech he gave a couple days ago on TV #4 (sec) was a big critique #4 (sec) critique means? #7

Ss [<T]; (No answer)

T [>Ss]; Critique means criticism. #4 (sec) There is a bit general knowledge which you have to know as students. = Yeahh. #4 (sec) OK= Now, about travelling #4 (sec) about travelling #3 (sec) the second point which we're going to do in the unit. #4 (sec) let me contextualize what we are going to talk. #4 (sec) Who would like to ask me a question about travelling?

Ss [<T]; (No answer)

T [>Fs2]; Can you take your feet down, please?= excuse me.= You don't do that at your mother's house, do you?

Fs2 [<T]; (No answer) #10 (sec)

T [>Ss]; Can you give me a question about travelling?= To me.

Ms4 [<T]; Have you ever gone to San Diago?

T [>Ms4]; No= I've never been to San Diago.= Another question? #6 (sec)

Ss [<T]; (No answer)

T [>Ss]; That's too narrow question, isn't it?

Ss [<T] ; (No answer) #8 (sec)

T [>Ss] ; What would you ask a person #4 (sec) first question about travelling?

Ms2 [<T] ; Do you like travelling?

T [>Ms2] ; That's it.= "Do you like travelling?" =Yes, I like travelling a lot. #4 (sec) I

have been travelling since I was very young. #3 (sec) Now, another question (to Fs3).

Fs3 [<T] ; (No answer) #6 (sec)

T [>Fs3] ; You have to narrow it down.

Fs3 [<T] ; Have you ever been #4 (sec) Egypt?

T [>Fs3] ; Very good.= To Egypt.= Yes, I have been #4 (sec) but unfortunately, unfortunately I was very disappointed.

A few [<T] ; Why?

T [>Ss] ; Because I didn't like the people. #3 (sec) It doesn't mean that you're not going to

like the people #3 (sec) you can go.= Y/N? #4 (sec) Some people don't like Turkey.= I like

Turkey. #4 (sec) It is a place I'll never go, for example.= Good= OK, now #4 (sec) you

know nowadays, too #3 (sec) a lot of holidays have become very #5 (sec) what very? #4

(sec) They become very+...?

Ss [<T] ; (No answer) #7 (sec)

T [>Ss] ; People take more holidays #6 (sec) holidays become a was of life= Y{N? #4

(sec) Not like my generation #3 (sec) people didn't use to travel a lot #3 (sec) yeah

travelling, please+... #5 (sec) What is the difference between travelling and holiday?

Ss [<T] ; (No answer) #7 (sec)

T [>Ss] ; I've told you before.

Ss [<T] ; (No answer) #6 (sec)

T [>Ss] ; What may I want, you or you? +/.

Ms4 [<T] ; I think holiday #4 (sec) is a regular thing to go #5 (sec) but in travel we can plan things.

T [>Ms4] ; It's not very clear.= One by one, please. (Other students are talking) You (point a student)

Ms5 [<T] ; You can travel for work #4 (sec) for with+... +/.

T [>Fs2] ; You

Fs2 [<T] ; (No answer) #5 (sec)

T [>Fs2] ; What is the difference between travelling and holiday?

Fs2 [<T] ; Travelling is for like a hobby+/.

T [>Fs2] ; Good.= For example+...

Fs2 [<T] ; Holiday is bayrams+/.

T [>Ss] ; Very good. #4 (sec) But also if I like travelling that means #3 (sec) I just don't go
to Antalya and sit on the beach or drink #4 (sec) I like to discover a bit about the country

#3 (sec) I like to discover bout the people #4 (sec) holiday #3 (sec) you can go on a short
trip to Antalya #4 (sec) to İzmir #3 (sec) and +... So, #3 (sec) we're finding nowadays lots
of people get very bored #4 (sec) holidays #3 (sec) they always look for an alternative.=
Alternative means what?

Ss [<T] ; (No answer) #5 (sec)

T [>Ss] ; Alternative means? #5 (sec) Something different. = So, #4 (sec) how would you
#3 (sec) if someone comes and tell [/] you "would you like to go to space for holiday?" #3
(sec) Would you like it? (to Ms6)

Ms5 [<T] ; (No answer) #5 (sec)

T [>Ms6] ; This is an alternative, isn't it? = I've never been to space.= How would you find
it?

Ms6 [<T] ; Space?

T [>Ms6] ; Space.

Ms6 [<T] ; Uzay.

T [>Ms6] ; Yeah, I'm speaking to you. #5 (sec) How would you feel if someone tells you
#3 (sec) OK, there is this tour #4 (sec) now imagine yes. #4 (sec) There is going to be a
tour #3 (sec) we're going to space for a week #3 (sec) for a couple of days. #3 (sec) Would
you take your opportunity? #4 (sec) to go to space?

Ms6 [<T] ; Yes #4 (sec) I want to go to space.

T [>Ms6] ; Yeah, look at me, not at him.= But why would you like to go to space?

Ms6 [<T] ; (No answer) #6 (sec)

T [>Ms6] ; To discover for example. #3 (sec) I would be very afraid because I'm not afraid
of earth life because I've travelled a lot but to go to space, it is different.= Have you been
to space?

Ms6 [<T] ; No.

T [>Ss] ; No= No= It's the word of being unknown. #5 (sec) Because I don't know
anything #3 (sec) so I'm very afraid to go to visit space.= Clear?= OK. #4 (sec) Now,

another point which is going to appear in the unit is about the problem of nowadays #3
 (sec) AIDS. #4 (sec) You always do the same, always.= Your manners need much to be
 improved.= Yes= OK= Thank you. #5 AIDS day #3 (sec) when is it celebrated?
 Ss [<T] ; (No answer) #6 (sec)

T [>Ss] ; We celebrate AIDS day, this is general knowledge #4 (sec) when?

Ms1 [< T] ; December.

T [>Ss] ; No, it's the first of December. #3 So, why has AIDS become a big problem
 nowadays?

Ss [<T] ; (No answer) #6 (sec)

T [>Ss] ; Why? = It's a big problem, Y/N? = Am I right or wrong? = Is it a small problem?

All [<T] ; Noo.

T [>Ss] ; Do you celebrate this day in Turkey?

Some [<T] ; No.

T [>Ss] ; Yes you do.

A few [<T] ; Yes.

T [>Ss] Yes you do+/-.

Ms3 [< T] ; But we don't know.

T [>Ms3] ; But yes you do celebrate this day.

Ms3 [< T] ; Ne zaman?

T [>Ms3] ; Yes, there are demonstrations in Istanbul.= They do.= Why do we celebrate
 this day? = To make people aware.= What is aware?

Ss [<T] ; (No answer) #6 (sec)

T [>Ss] ; To make aware of dangers.= Yes, to make people aware of the dangers.= Clear?

#4 (sec) Because it's a big problem and who is effected? #3 (sec) It's OK, Tolga! = Can
 you please speak to me, not to her, please? #4 (sec) Clear? #3 (sec) So, why do you think
 God's men make sure to celebrate AIDS day?

Ss [<T] ; (No answer) #7 (sec)

T [>Ss] ; To make us aware #4 (sec) of the dangers. #5 (sec) And what else? #4 (sec) To
 make us (point his head)

Ms7 [< T] ; X.

T [>Ms7] ; But in English, please.

Ms7 [< T] ; But I don't know the word.

T [>Ms7] ; ((point his head)) What is this?

Ms7 [< T] ; Brain.

T [>Ms7] ; This is mind, not brain. #2 (sec) To make us+... #3 (sec) Good. #4 (sec) Think of others.= Because which countries does AIDS+...

Ss [<T] ; XX.

T [>Ss] ; Good.= But which counties are effected?

A few [<T] ; Africa.

T [>Ss] ; It makes us think of those people.= Every year about #3 (sec) 5 million people die, this is a lot of people #4 8sec) more women nowadays are effected by AIDS, yeahh?=
You can't say in Turkey we don't have AIDS, #4 (sec) I mean your government has said we have 2000 people are already effected. #3 (sec) Do you believe it?=
Do you believe that 2000 people #4 (sec) ohh nooo.= I don't believe, 2000 people+...
(laugh) #5 (sec) Is there anything special with Turkey?=
I don't know. ^3 (sec) Turkey is like any other country.=Y/N? #3 (sec) The dangers are same, there are lots of tourists who come here.= OK. #4(sec) So, there are the topics #4 (sec) which we are going to have in unit and do you know what I noticed? #3 (sec) No one has been taking any notes!= Is there anyone taking any notes?

All [<T] ; No.

T [>Ss] ; Why?=
I mean as you know your listening exam wasn't brilliant, was it?

Ss [<T] ; (No answer) #5 (sec)

T [>Ss] ; You took very badly.= Where are you bad?=
On+...? #4 (sec) on taking notes.= So, #3 (sec) those are important even for writing #3 (sec) very general knowledge.= OK=
All right.= That's enough. #5 (sec) Turn page 176, yeahh.= OK. #4 (sec) I gave you those knowledge because books are not up to dates.= Y/N? #4 (sec) It is impossible to have a book printed in 3 months.= But those are #5 (sec) statistics which are more up to date.= Y/N?=
Clear? #5 8sec) So, on the first section you have some notes, yeah? #4 (sec)= Ufuk, can you read a bit "Did you know", please, p.176.

THIRD- CLASS HOUR PART 1

EXTRACT 2: "TRUTH" OR "LIE" GAME P: 182

T [>Ss] ; OK= Look at p. 182. #3 (sec) You are going to play a game. #5 (sec) Can I have this? (from one of the students teacher takes a paper) #7 (sec). Look at p.182, you're going to play a game.= All right.= So, #4 (sec) exercise 8, that's not important. #4 (sec) Exercise 9. #3 (sec) Would you like to read a bit, please? = Could you read exercise 9 (to Ms6)?

Ms6 [< T] ; Starts reading+/-.

T [>Ms6] ; Aha, I want you to read only exercise number 3.

(Ms 6 reads number 3)+/-.

T [>Ss] ; That means you're interested.= I'm going to start telling a story #3 (sec) love, all right+...

(Ms 6 continues reading)

T [>Ss] ; OK= Now, #3 (sec) look at me. #4 (sec) So, I'm going to tell a story #3 (sec) then you have to ask me for more information. #4 But you have to do it too+... You have to tell me if I'm lying or not.

A few [<T] ; You' not.

T [>Ss] ; I may not be lying.

A few [<T] ; You'll lie.

T [>Ss] ; All right.= But after that #3 (sec) you invent a story. #4 (sec) It can be true or not but you have to guess if you're lying or not. #4 (sec) So, I'm going to model. #4 (sec) One day+...

(Ss laugh) I was in Urea #4 (sec) the Urea experience. (laugh) #7 (sec) Oh, my tooth is getting much better. #3 (sec) One day+/-.

A few [<T] ; Which day?

T [>Ss] ; One day #5 (sec) OK, I'm not going to tell you my story. #3 (sec) All right= All right= One day I was flying, its true #4 (sec) but I'm going to lie. #4 (sec) One day, I was flying from Montreal to London in February.= Ask me a question.

A few [<T] ; Why did you+...+/-.

T [>Ss] ; Good.= Because I've been on holiday in Montreal #3 (sec) and I was going to London+/-.

Ms6 [<T] ; Which year?

T [>Ms2] ; 2 years ago.= Now, 33 (sec) when I got on the plane+... #4 (sec) Ask me a question. #3 (sec) What happened?

A few [<T] ; What happened?

T [>Ss] ; OK= When I got on the plane #3 (sec) I realized #3 (sec) my ticket was in first class+/.

Some [<T] ; You're lying.

T [>Ss] ; Am I right or wrong?

Some [<T] ; Nooo.

T [>Ss] ; Noo= its true.= I didn't understand.= Oh, they gave me a ticket in first class. #3 (sec) Ask me a question (to Ms6)

Ms6 [<T] ; Why did they give you+...+/.

T [>Ss] ; Very good. #4 (sec) Because they upgraded me.= What does it mean?=
Upgraded?

Ss [<T] ; (No answer) #4 (sec)

T [>Ss] ; upgraded #4 (sec) if you're a regular customer to an airplane #3 (sec) they give you a good seat.= So, I+...#4 (sec) very good question.= They upgraded me.= I was very surprised.= Good.+/.

Ms1 [<T] ; Was you alone?

Ms5 [<T] ; Where+...

T [>Ss] ; Very good. #4 (sec) At the time I was alone. = So, I tired to put+/.

Ms1 [<T] ; XXX

T [>Ms1] ; One second. #3 (sec) Yavaş. #3 (sec) Very fast.= So, poor I was trying to put my bag in the #2 (sec) what?= On the plane.

A few [<T] ; Baggage.

T [>Ss] ; What's this on the plane?

A few [<T] ; Luggage.

T [>Ss] ; A compartment.= Luggage compartment. Am I right or wrong? = Am I right or wrong?

Ss [<T] ; (No answer) #4 (sec)

T [>Ss] ; My thesis was better, wonderful+/.

A few [<T] ; Not lying. = Not lying.

T [>Ss] ; Very good.= Not lying. #4 (sec) How can I tell+... #4 (sec) Once upon the joke=
OK= So+/.

Fs3 [<T] ; How do you feel?

T [>Fs3] ; How do you feel+...

Fs3 [<T] ; How do you feel WHEN YOU #5 (sec) hmmm+...

T [>Fs3] ; I was surprised because I thought they did a mistake. (laugh) #12 (sec) Am I
lying or not?

Some [<T] ; Nooo= Not lying.

T [>Ss] ; Good.= So, another friend+... #5 (sec) But I was very surprised because when I
turned around I saw a very nice 22 year old girl.

A few [<T] ; Ohhh #4 (sec) You are lying. (laugh)

T [>Ss] ; No, it was true.

A few [<T] ; No.

T [>Ss] ; Ask me another question!

Ms7 [<T] ; Can you describe the girl?

T [>Ms7] ; I can't remember because she was very nice. #4 (sec) She was Canadian but
ask me about the girl, "Was she Surprised?" foe example.

Fs4 [<T] ; What did you think about her?

T [>Fs4] ; ((When I turned my nice body around)) #4 (sec) this is going to be a wonderful
night. (laugh) So+/.

A few [<T] ; Was she alone?

T [>Ss] ; Yeahh= I can't catch my prayers+... Am I lying or not?

A few [<T] ; Lying. = You are lying.

T [>Ss] ; No.

Ms8 [<T] ; How did you learn she was alone?

T [>Ms8] ; Because when she turned #3 (sec) she had my problem, too. #4 (sec) She was
very surprised because she had been upgraded. Am I lying or not?

Some [<T] ; Lying.

T [>Ss] ; Not lying. =So, 33 (sec) I looked at her and said+... #3 (sec) I can't tell her name
because I don't remember. #3 (sec) I said "I think they have done a mistake." = She said
"Even me because I don't+..." Because she was a student going to Australia to study to her
M.A. #4 (sec) she said "I think they've done a mistake too." = I said "Yani". =Yes.= Y/N?

#4 (sec) They've done a mistake. #4 (sec) Come on, it's a good story. #3 (sec) Give me another

Ms1 [< T] ; Did you take her number?

T [>Ms1] ; Can you imagine #4 (sec) meeting a girl and saying "Can I have your number?"

#4 (sec) We haven't left Montreal.= We're very fast. #5 (sec) So, tell me your question.

Ms3 [< T] ; Did you #4 (sec) you take to #4 (sec) her?

T [>Ms3] ; Ohh, a lot.= So+...+/.

Ms3 [< T] ; What about?

T [>Ss] ; So, all the conversation started because both of us were upgraded.= So, I #4 (sec) we were in big seat, first class #4 (sec) very comfortable+...So, I told her to sit next to the window #3 (sec) and I sat+/.

Ms9 [< T] ; Corridor.

T [>Ss] ; Aisle. Very good. #4 (sec) What do you think I asked her? = What do you think I asked her?

A few [<T] ; Her name.

T [>Ss] ; Her name, what else?

A few [<T] ; Her age. #3 (sec) Where are you going?

T [>Ss] ; "Where are you going?" = Good. = What else?

Ms10 [< T] ; School.

T [>Ss] ; Very good.= And she answered all the questions, am I lying?

Some [<T] ; Yeahhh.

T [>Ss] ; No= All right. #3 (sec) All of a sudden #4 (sec) the air stewards because there were only 15 people first class #4 (sec) 15 or 17+/.

Fs6 [<T] ; 18.

T [>Fs6] ; Or 18.= OK. = #4 (sec) The air stewards came with a champagne and orange juice+/.

A few [<T] ; Ash.

T [>Ss] ; And appetizers.= Am I lying?

Some [<T] ; Yes.

T [>Ss] ; No. #5 (sec) When the plane took off #4 (sec) the girl started feeling very cold and+... Am I lying?

Some [<T] ; Noo.

T [>Ss] ; ((Because it's very cold there)) (points up)+/.

A few [<T] ; Not lying.

T [>Ss] ; Very good. #4 (sec) So, what did I do?

Ms8 [< T] ; You gave her #4 (sec) jacket.

T [>Ms8] ; Nooo #4 (sec) What did I do?

Ms4 [< T] ; Embraced her.

T [>Ms4] ; No.

Ms9 [< T] ; Change your seats.

T [>Ms9] ; No. #4 (sec) She was in a very good position by window.

Ms4 [< T] ; Embraced.

T [>Ss] ; What did I do?

Fs5 [<T] ; Calling hostess.

T [>Fs5] ; Very good.= What did I ask the hostess?

Fs5 [<T] ; Can you make it more+...

T [>Ss] ; Noo. #3 (sec) I asked the hostess for a ((showing "hug" with hands))

Ms8 [< T] ; Hug. (laugh) Battaniye ne arkadaşlar?

T [>Ss] ; For a blanket.= Am I lying or not?

Some [<T] ; Noo.

T [>Ss] ; What did I use the blanket ? (Ss laugh)

T [>Ms4] ; Was I really very cold, too? (to Ms 4)

Ms4 [< T] ; Yes.

T [>Ss] ; Very hot but I pretended it to be very cold. #4 (sec) So, what did I do with the blanket?

Some [<T] ; Share+...(laugh)

T [>Ss] ; Very good. #3 (sec) Now, did [//] Do you think what happened after that?

A few [<T] ; Kissing #3 (sec) sarılmak.

T [>Ss] ; We slept all the way to London. 35 (sec) The air stewards didn't wake up us even for dinner.34 (sec) She came in the morning, #3 (sec) this is your breakfast #3 (sec) and she said #4 (sec) because you were very tired+...#5 (sec) stewards don't wake you up because it's a long journey. = And she gave us breakfast. #5 (sec)Then I took the girl to London for a day and then to Australia.= And that's a true story.

Some [<T] ; Not.

T [>Ss] ; It's a true story.

Ms7 [<T] ; Why didn't you say lie?

T [>Ms7] ; Because #3 (sec) no, you don't have to lie. = You can do true or not. #4 (sec)

Anyway go for+...When you come back, #4 (sec) you have to invent a story, yeahh? #3

(sec) OK.

(Ss have a break)

FOURTH CLASS HOUR

EXTRACT 3 TALK IT OVER P: 183

T [>Ss] ; OK = Anyway. = Look at p: #3 (sec) 183. = All right. #4 (sec) I'm going to explain the vocabulary. #3 (sec) Imagine you're stuck on an island #4 (sec) like Robinson Crusoe #2 yeahh.= OK #2 (sec) Now, look at those items. #4 (sec) Imagine you're on a desert island. #3 (sec) OK, we've a box of matches. #2 (sec) p: 183. #3 (sec) I'm doing the vocabulary. = You have dried food. #3 (sec) Can you give me an example of dried food? #3 (sec) Example?

Ms7 [<T] ; Kokareç #4 (sec) canned+/-

T [>Ss] ; Malatya. #2 (sec) Apricot, #3 (sec) dried fruit #2 (sec) yeah. #3(sec) Otherwise it's fresh fruit. #3 (sec) When you're on an island it goes off. #2 (sec) Phrasal verb #2 "Goes off" means?

Ss [<T] ; (No answer) #4 (sec)

T [>Ss] ; You can't, #3 (sec) you can't eat it. #3 (sec) After 2 days it goes off because it's not fresh. #4 (sec) Dried food lasts a lot #2 (sec) Y/N? #3 (sec) OK, then you have rope, you know rope?

A few [<T] ; Halat.

T [>Ss] ; Yes= OK= Then you have parachute+/-

A few [<T] ; Yes.

T [>Ss] ; OK = Portable heating unit, is something which you carry. =OK= Good. #3 (sec) Pestle you know.= Shoot #2 (sec) #3 (sec) Dehydrated milk, #2 (sec) that's very important .OK.

A few [<T] ; Yeaahhh.

T [>Ss] ; When do we get dehydrated #2 (sec) when?

Ss [<T] ; (No answer) #4 (sec)

T [>Ss] ; When? #4 (sec) When we don't have enough water.= We can live without food for a long time #2 8sec) but not by not drinking for a long time. #3 (sec) For example: Today I don't eat #2 (sec) no problem. #3 (sec) But I drank lots of water or orange juice.= No problem. #3 (sec) We should drink 2 lit of water or juice to be #3 (sec) from dehydrated. #3 (sec) Now, #3 (sec) when do we #2 (sec) do we #3 (sec) people XX dehydrate?

Ss [<T] ; (No answer) #4 (sec)

T [>Ss] ; It's very dangerous. #3 (sec) In summer, #2 (sec) in summer it's very hot of 45 degrees but we don't #3 (sec) drink lots of water, do we? = We don't eat a lot. = So #3 (sec) dehydration are [/] what we need water #3 (sec) everybody needs water. #3 (sec) Where else can we dehydrate?

Ss [<T] ; (No answer) #5 (sec)

T [>Ss] ; When there is a disaster in the world. #2 (sec) What does the government do? #4 (sec) It tries to bring the water. #3 (sec) With no food we can survive, that's true. #4 (sec) With no water or juice we can't a lot.= So, #2 (sec) dehydration means when we lose lots of water from body. = So, #2 (sec) On the plane, if you go on a long journey you dehydrate, #3 (sec) that's why you have to drink #3 (sec) not alcohol #3 (sec) lots of water or apple juice. #3 (sec) #2 (sec) Alcohol is very dangerous in high altitude. #3 (sec) So, you have to drink lots of liquid. #3 (sec) You dehydrate in winter in this room, too.= Why? = Because you don't open the window and the central heating is full on. #3 (sec) And that's very bad #2 (sec) for your skin. = That's why people #3 (sec) you should drink water. = OK. #2 (sec) Then you have tubes of oxygen #2 (sec) When you run out of oxygen #2 (sec) OK.= Map you know. #2 (sec) Life raft. #3 (sec) Raft is like a little boat+/.

A few [<T] ; Boat.

T [>Ss] ; Good.= Magnetic means big #4 (sec) compass here. #5 (sec) So, in your opinion #2 (sec) all of you have to choose one thing which you'll find very useful. #3 (sec) If you were stranded on this desert island, +...But you have to tell me "Why", you'll tell me why you chose+...#3 (sec) Think a bit.= OK= Because you're on a desert island #2 (sec) you have to choose the most important item in your opinion. #2 (sec) What is it!
(Ss think for 2.5 minutes)

T [>Ms6] ; What will you choose from those?
 Ms6 [<T] ; I'll choose box of matches.
 T [>Ms6] ; Why?
 Ms6 [<T] ; Because fire very important for life. #4 (sec) Hmm, you can't live without fire.
 T [>Ss] ; Who will choose the pestles? = I think I'll choose the pestles+...
 Ms2 [<T] ; I choose+...
 T [>Ms2] ; Why?
 Ms2 [<T] ; Because of the wild animals.
 T [>Ms2] ; Good. = And I can eat it. (to Fs4) What will you choose?
 Fs4 [<T] ; The first thing+/.
 T [>Fs4] ; The first +/.
 Fs4 [<T] ; I choose water of gallon.
 T [>Fs4] ; Yeah, but water #2 (sec) runs out very quickly, #3 (sec) do you understand me?
 Fs4 [<T] ; (No answer) #3 (sec)
 T [>Ss] ; What about the compass? = Don't you think+/.
 Ms1 [<T] ; I choose magnetic compass+/.
 T [>Ms1] ; Very good+/.
 Ms1 [<T] ; Because I have to find my way+/.
 T [>Ms1] ; Location.
 Ms1 [<T] ; You can use fire, too.
 T [>Ss] ; What else?
 Ss [<T] ; (No answer) #5 (sec)
 T [>Ss] ; What about the radio transmitter? #2 (sec) to get in touch with outer world.
 Ss [<T] ; (No answer) #3 (sec)
 T [>Ss] ; To come to save you.
 Ss [<T] ; (No answer) #4 (sec)
 T [>Ss] ; Now = All right #3 (sec) Before we stop, #3 (sec) tomorrow we don't have class.
 Close the book please+...

FIFTH CLASS HOUR

EXTRACT 4 PART 2 PRE- LISTENING DISCUSSION P: 184.

T [>Ss] ; Now, #4 (sec) all right, look at the question 4 for example on p: 184. #7 (sec)

Who would like to read?

(Ms4 reads the question)

T [>Ss] ; OK.= If someone have to give me that question, #3 (sec) I say I do something

strange at night. #2 (sec) Am I going to look outside and say #3 (sec) "Oh, it's a full

moon." #3 (sec) If I do something strange, which I do a lot, I don't care about the moon. #4

(sec) But that's my answer.= So, #3 (sec) you (to one of the students)

Ms8 [<T] ; My answer is similar+...

T [>Ss] ; To me+./

Ms8 [<T] ; Yes, I don't feel #4 (sec) anything when the moon is full.

T [>Ss] ; OK= Who can answer the question? #5 (sec) Who feels something when the

moon is full?

Ss [<T] ; (No answer) #6 (sec)

T [>Ss] ; You say, that's proved out of us.= Because for me, it's very strange.= Because

the earthquake that we lived #3 (sec) I was around and then the moon was very full and I

heard dogs barking before the earthquake #3 (sec) and I said "My God tonight there's lots

of barking." #3 (sec) They said, #4 (sec) animals, #3 (sec) they say so, #3 (sec) I don't

know because I'm nor a scientist. #3 (sec) That animals can smell that an earthquake is

coming. #4 (sec) Who believes in that?= Because I think, I believe in that.

Ss [<T] ; (No answer) #7 (sec)

T [>Ss] ; That's different because every time there was an earthquake even little

shake+...#3 (sec) I hear dogs barking but whole night. #3 (sec) So, you see some of us

believe in that.=Y/N? #5 (sec) OK= So, now #3 (sec) we'll put the cassette later on, #4

(sec) I want you to take a paper to write your notes.= Yes. #4 (sec) I'll explain the

vocabulary #2 (sec) p: 185.

#5 8sec) "To regulate" means #4 (sec) to #3 (sec) to+...OK= #3 (sec) to regulate is to

control, please+...#3 (sec) like the central heating. #4(sec) "Ocean tides" #3 (sec) When

you see especially in the evening, too. #4 (sec) Even in summer the tides come in #2 (sec)

or out+...

A few [<T] ; Get gel.

T [>Ss] ; Yes. #2 (sec) Who likes midnight #2 (sec) to walk on beach in midnight? = Very nice, yeahh #4 (sec) because the tide comes in or out. = Now, #3 (sec) the tide though could be dangerous because for example in London we have a river+/.

A few [<T] ; Yes.

T [>Ss] ; But if the tide goes up it can flood London #3 (sec) flood #3 (sec) what is flood?

Ss [<T] ; (No answer) #5 (sec)

T [>Ss] ; Lots of water #3 (sec) because the tide is sometimes ((this size)) #4 (sec) sometimes goes up+/.

A few [<T] ; Rise.

T [>Ss] ; Yeah. #3 (sec) OK. = Unpredictable is?

A few [<T] ; Known.

T [>Ss] ; No = Not known #3 (sec) changeable. = It changes #3 (sec) every two minutes though #3 (sec) not every two hours. = Yes = OK. #2 (sec) Then you have "Loony" that comes from "Luna", too. #3 (sec) A loony person is a maniac.

(All of them laugh)

T [>Ss] ; That's it. = OK = Go for a break don't touch my cassette.

(Students have a 15 minute break)

Then they start listening to the lecture

APPENDIX 4
 TAPESCRIPT TEACHER 2

FIRST CLASS GOUR
 EXTRACT 1 WARM – UP

T [>Ss] ; OK, good morning.

Ss [<T] ; Good morning, teacher.

T [>Ss] ; Yes, Today we will start Unit 9.= Can you please look at the title of the unit 9?

#7 (sec) p: 175.= Look at p: 175.

(Students open their books)

T [>Ss] ; The topic maybe about you #3 (sec) I don't know.= Do you know the word
 "Frontier"?

Ss [<T] ; No.

T [>Ss] ; New Frontiers. #3 (sec) Do you have any idea? #3 (sec)

Ss [<T] ; (No answer) #3 (sec)

T [>Ss] ; Frontier?= What may it be?

Fs1 [<T] ; Do something first.

T [>Fs1] ; To do something first+/-.

Fs1 [<T] ; First.

T [>Fs1] ; To do something first, OK #2(sec) to be first. #2 (sec) Do you agree?

A few [<T] ; Yes.

T [>Ss] ; To be the first, OK.= In fact hmmm #2 (sec) it's about, not about people #2 (sec)
 but about #4 (sec) what kind of area? #2 [sec] may it be?

Ms1 [<T] ; Spice.

T [>Ms1] ; New areas, OK= Space not spice #3 (sec) all right, space.

(Students laugh)

T [>Ss] ; Space, OK is one of them.= It is a new frontier for us.= Why?

Ms2 [<T] ; There is nobody.

T [>Ms2] ; Nobody?

Ms2 [<T] ; Is there.

T [>Ms2] ; Is here.= Is there, OK.= Nobody is there so we do not know much about it,
hmm? #4 (sec) OK. #3 (sec)

T [>Ss] ; So, it is ready for discovery I think shah?= The space+... All right, so space is a
frontier, OK?= We call #3 (sec) frontier is #3 (sec) area which is ready to explore.= Which
is ready to #3 (sec) discover, OK?= New areas in science, OK?= Which are ready to
exploring.= We do not know about much.= And we are exploring it.= So, it is a frontier.

XX What may be the other frontiers?

Ms3 [< T] ; People or oceans.

T [>Ms3] ; Oceans, OK.= Maybe= Hahn= All right= Hih #3 (sec) What else? #5 (sec)

Ms4 [< T] ; Science.

T [>Ms4] ; Science,OK.= So, there are some areas in science, too.= What may+...?

Fs1 [<T] ; Physics.

T [>Fs1] ; Physics, OK.

Ms? [< T] ;Biology.

T [>Ms?] ; Biology= Chemistry.

Ms4 [< T] ; Geography.

T [>Ms4] ; Geography, OK. In all those kind of areas we need to explore.=v We need to
find out something.= Some new things.= For instance, think about AIDS #3 (sec) Think
about that illness #5 (sec) OK, did we know about it in the past? #3 (sec)

A few [<T] ; No.

T [>Ss] ; No.

Ms?? [< T] ; Because there is XX in the past.

T [>Ms??] ; OK, when did it start.= Do you know?

Ms?? [< T] ; I think 84.

Some [< T] ; 1983.

T [>Ss] ; OK, 1980s in that year #3 (sec) virus that cause to this illness.= What is the name
of this virus?

Some [< T] ; HIV.

T [>Ss] ; HIV,OK.= Right= HIV is the virus so in 1983, OK.= Can you look at p: 176, you
will see the information there.= What is the #4 (sec) long form of HIV? #3 (sec)

A few [<T] ; Human+/-.

T [>Ss] ; Human+...

Ss [<T] ; XX .

T [>Ss] ; How do we read that?

A few [<T] ; Inefficiency+...

T [>Ss] ; Human efficiency, hih? #4 (sec) virus, OK.= So, this virus causes AIDS, all right? = And so, we first identified it in 1983 and #4 (sec) hmm doctors and scientists, they are exploring what now? #4 (sec) What do they explore?

Ms1 [< T] ; Cure.

T [>Ms1] ; Yes, all right. =So, #3 (sec) they are exploring the cure #2 (sec) how can we solve #3 (sec) this illness? = They are working on that. = All right. = This kind of things. = This kind of areas so we can call them frontiers, right? #3 (sec) And now, I want you to close your books. = Don't look at your books #4 (sec) I'll ask you some questions about space. = We'll see how much you know about it, it's a kind of trivia quiz #2 (sec) remember we do it?

(The teacher ask some general questions and the students try to answer them)

T [>Ss] ; OK= Can you please get into 4, groups of 4 #3 (sec) very quickly, I'll have some questions for you #13 (sec) be quick please.

(Students arrange their seats)

The teacher distributes some papers to the students. #15 (sec)

T [>Ss] ; Now, we'll #20 (sec) do the same thing=Right? = The paper I gave the person will talk first #4 (sec) =OK= This time I want the person who has the question to talk about the topic first #2 (sec) and the others will make a comment on the same question, too. =All right? = So, read your question, think about for a minute then start to talk. = Right?

(Students get prepared for 6 minutes, the teacher prepares the Cd then listens to the groups)

T [>Ss] ; Do not forget to comment on your friend's question, right? Tell your idea, too.

(Students continue talking about the questions)

After 8 minutes.

T [>Ss] ; OK= Let's talk about the questions before we begin to talk. = What do you think #4 (sec) about the first question? = Is there a life in the solar system? = Are intelligent aliens trying to contact us? = Who says "Yes"? = Raise your hand! #8 (sec) Only 5 people #3 (sec) it increases 6 people.

Ms2 [< T] ; I don't think they contact us.

T [>Ms2] ; OK= All right.

Ms3 [> T] ; There is no enemies.= I think+... Scientists explore primitive #4 (sec) bacteria fossils #4 (sec) so I think there is life in space.

Ms2 [< T] ; There is no alien.

T [>Ms2, Ms3] ; OK= There can be some intelligent creatures but in our system no you say.

Ms3 [< T] ; Because different factors+...

T [>Ss] ; OK= So, do you agree?

All [<T] ; Yeeeesss.

T [>Ss] ; Then the other question.= Look at the second question #4 (sec) which is about this #2 (sec) should we go to explore the space?

All [<T] ; Yeeeesss for ever.

T [>Ss] ; Yes= Is there anyone who says No? #5 (sec) OK, what are the advantages and disadvantages of exploring the space?

Ms7 [< T] ; New holiday places+...

T [>Ms7] ; So, we can find new holiday areas= All right.

Fs3 [<T] ; Find new sources.

T [>Fs3] ; Hmm #3 (sec) OK= Other sources to produce energy.

Ms710 [< T] ; How others exist.= how solar #3 (sec) system exists.

T [>Ms10] ; Right= OK= And think about the things that we've done up to now.= What are the advantages of space exploration?#2 (sec) for the world= What are the benefits?

Fs4 [<T] ; We can communicate on the world.

T [>Fs4] ; Yes.= Because of what? #3 (sec) What was it? #4 (sec) Satellite= Right= OK= What are the disadvantages of it?

A few [<T] ; No disadvantage.

T [> Ss] ; No disadvantage?

Ms4 [< T] ; A lot of satellite in space #4 (sec) in space there is #3 (sec) dirty operation about space. #4 (sec) It can cause some effects.

T [>Ss] ; And my question is= Why doesn't Turkey explore space?

A few [<T] ; XXX

T [>Ss] ; OK= We don't have enough technology and we don't have enough money. #4 (sec) So, space exploration is+...?

All [<T] ; Expensive.

T [>Ss] ; My last question.= You know that #2 (sec) there is global warming in the world.=
And in the future maybe there will be #2 (sec) no land to live.

(Students laugh)

T [>Ss] ; So #3 (sec) do you think #3 (sec) will we have to live in colonies in the future?

Ms6 [< T] ; No= Maybe.

Fs4 [<T] ; Turkey stay+...

T [>Ss] ; We will be able to do this.= Would you like to live in space if you have the
chance?

All [<T] ; Nooo+/.

T [>Ss] ; Why not?

Ms62 [< T] ; Temporally.

T [>Ms2] ; OK= Temporarily yes you say.= If it is necessary. #3 (sec) Why don't you
prefer to live there? \$6 (sec)

Ss [<T] ; (No answer)

T [>Ss] ; OK= Everything is here but no #3 (sec) you'll not be the only person in #2.5(sec)
space you will live in colony.

(Students laugh)

T [>Ss] ; OK= Let's have a break now.

THIRD CLASS HOUR

EXTRACT 2 LISTENING FOR THE MAIN IDEA P: 177

T [>Ss] ; OK= Sit down= All right. #5 (sec) Now, open your books #2 (sec) p: 176

(Students open their books)

T [>Ss] ; Who do you see in the picture?= Who are they?

Ms3 [< T] ; There is a man.

T [>Ss] ; All right.= Yes, Jeff, Anna, and Nancy they will+...

Ms2 [< T] ; Gene mi yaaa+...

T [>Ms2] ; Yes= Again they will talk about space exploration= OK= We'll listen to their
ideas about #3 (sec) space exploration.= We talked about #3 (sec) your ideas, now #4 (sec)

we'll listen to their ideas. =But #4 (sec) before listening to it #4 (sec) can you do exercise #3 (sec) 2? = Look at the #3 (sec) words in the list and #3 (sec) try to find their definitions.
EXTRACT 3 "TRUE OR "LIE" GAME P: 184

T [>Ss] ; Now, I want you to get in groups of 4 again. #4 (sec) Make groups of 4, please, very quickly.

(Students make groups) #9 (sec)

T [>Ss] ; Yes = Be quick. = Be quick. = Make circle.

(Students arrange their seats) #2 minutes

T [>Ss] ; Now, I'm going to give you some papers #3 (sec) small pieces of papers, OK. #3 (sec) And don't show these papers to your friends, OK? #4(sec) First of all, keep them in your hand.

(Teacher distributes the papers) #25 (sec) Don't show it. = Now #3 (sec) I want you to tell your friend an [/] a surprising event about you, OK? #3 (sec) You'll talk about a surprising event #3 (sec) but look at the paper in your hand #3 (sec) and it will give you the instruction #4 (sec) it will be a lie or #3 (sec) it will be a true event, OK? #4 (sec) You'll tell your story to your friend and then your friends vote #4 (sec) whether you'll [/] #2 (sec) you're telling the truth or you're telling a lie, OK? #3 (sec) The task is talk about a surprising event in your life, OK? #3 (sec) Think now, everyone think about a minute. = OK 2 minutes.

(Students laugh)

T [>Ss] ; 2 minutes is enough. #3 (sec) Think about an event then #3 (sec) tell it to your friends, OK? = Is it clear?

(Students laugh)

T [>Ss] ; So, you'll talk about surprising information about you, OK? #4(sec) And you'll use surprisingly, oddly enough, OK? #3 (sec) Would you believe, believe it or not #3 (sec) this kind of expressions, OK. #5 (sec) Her durumda doğru söylediğinize inandırmaya çalışıyorsunuz ,tamam? = Yalan ya da gerçek yazıyor kartınızda. #3 (sec) Her durumda doğruyu söylediğinize inandırmaya çalışıyorsunuz #4 (sec) sonunda vote ediyoruz. #3 (sec) Try it in English. = This can be a question in your final exam, too. #4 (sec) For example: A surprising event in your life, OK. #3 (sec) This kind of question may be in your exam, too.

(Students talk among each other for 5 minutes)

T [>Ss] ; In English.= In English.= Don't forget to the expressions.= I don't hear them.

(Students continue talking) #4 minutes.

T [>Ss] ; OK= It's break time.= You can tell your stories after the break#4 (sec) but up to now #3 (sec) did your friends make correct guesses about your stories?

A few [<T] ; No+...Nasıl anlayacaklar+...

T [>Ss] ; OK= OK= Let's have a break.

FOURTH CLASS HOUR

EXTRACT 3 TALK IT OVER PART P: 183

T [>Ss] ; OK= You should stay in groups of 4 still #4 (sec) so do not change your position. #15 (sec) OK= Hmm, now #4 (sec) we'll do the exercise on p: 183. #4 (sec) We've got an interesting #4 (sec) interesting problem here. = Look at p: 183 #6 (sec) OK= Now, all of you #5 (sec) all of you are astronauts, OK?

Some [<T] ; Süper yaaa+...thank you.

T [>Ss] ; All right= And you have a problem. #4 (sec) You're a member of space crew #3 (sec) but your spaceship has to #4 (sec) had to land into the light side of the moon #4 (sec) because of some technical problem, OK? = Your spaceship #3 (sec) doesn't work.= And #3 (sec) you're on the moon, all right?

Ms2 [< T] ; Tamir team.

T [>Ms2] ; No= You can't fix it. #3 (sec) And you'll meet another ship, another spaceship #4 (sec) but it is 200 miles away.

Some [<T] ; Off+...

T [>Ss] ; OK= There's another spaceship #3 (sec) but it is 200 miles away. =And you have to ((walk)). =Right.

Ms? [< T] ; Kafayı yiyecez.

T [>Ss] ; You have no spaceship #4 (sec) you're on the moon, OK?= And you have to leave #5 (sec) your spaceship which is #4 (sec) 200 miles away. #3 (sec) Yes, this is the problem. #3 (sec) There are+...OK= There are 14 items on the spaceship #3 (sec) and you can take them but #4 (sec) hmmm you have to #4 (sec) let me say #5 (sec) you have to

choose.= I want you to work in groups and #3 (sec) I want you to rank them according to their importance, OK?= Which are #5 (sec) the most important items, which are #3 (sec) the least important items and decide which to take, OK? #4 (sec) Which not to take.= But wait a minute.= Do not start now. #4 (sec) You have to think about these items #3 (sec) whether it will be a good idea to take them or #4 (sec) it will be a bad idea to take them #4 (sec) because you have to walk for 200 miles.= Don't forget that. =Decide #4 (sec) first #5 (sec) rank them #5 (sec) rank them in order to according to their importance, OK? #3 (sec) Then you'll decide. =And #5 (sec) you have to #4 (sec) give reasons why you're taking #4 (sec) you want to take with you.= Why they're so important.= You have 10 minutes to do this.= 10 minutes.

(After 12 minutes)

T [>Ss] ; OK= Now #3 (sec) Let's talk about these items together. #3 (sec) Let's go by group.= Tell me first 5 important items for you.=OK. #5 (sec) Listen to your friends and look whether you have the same ranking #3 (sec) or different one, all right? =Yes.

(All the groups tell the important item for their group)

T [>Ss] ; Now, you have got really different things in your lists. #4 (sec) Can you tell me your reasons? #4 (sec) For example: ((In this group)) I heard+...So, first important item is pestle.= Do you agree?

Some [<T] ; Noo.

T [>Ms??] ; What about your ideas? #3 (sec) Does it work in space? #4 (sec) The pestle #3 (sec) Why not?

Ms?? [<T] ; (No answer) #7 (sec)

T [>Ss] ; Why won't work it in space?

Ms?? [<T] ; Can't fire.

T [>Ms??] ; You can't fire it.= OK.

T [>Ms7] ; You have life craft in your list (to another group) OK= How are you planning to use it?

Ms7 [<T] ; I think life craft is necessary #4 (sec) because we can't carry things, water, and oxygen #5 (sec) we can put them into it and we can #4 (sec) cover with parachute silk and tie with rope+/.

T [>Ss] ; OK= How many of you #3 (sec) has the rope in upper parts of the list?= Is rope important to you?

Some [<T] ; Hayır.

Some [<T] ; Yes.

T [>Some] ; Important to you.= The others? #5 (sec) OK= How can we use the rope?=
 Any other ideas? #6 (sec)

A few [<T] ; Parachute.

T [>A few] ; OK.

Ms4 [<T] ; We tie ourselves together #5 (sec) and we don't leave alone anywhere.

(Students laugh)

T [>Ms4] ; Yes= OK= You may use it to tie #4 (sec) every person to each other #5 (sec) in order not to miss or lose someone sorry, hih? #6 (sec) So= OK, my last question is "Do you think there should be something else in your list?= Something very important but it is not in this list?

Ms5 [<T] ; Valla kebab olsa iyi olur.

Ms2 [<T] ; Working spaceship.

T [>Ms2] ; A working spaceship? = Any other idea?

Ms? [<T] ; Cigarette.

T [>Ms?] ; Cigarette.= How would you smoke it ?= Would it work? #4 (sec) ((inside your clothes))

(Students laugh) #9 (sec) How can you smoke cigarette on moon?

(Students laugh) #7 (sec)

T [>Ss] ; No, because again #4 (sec) what is missing?

Some [<T] ; Oxygen.

T [>Ss] ; Oxygen is missing #3 (sec) maybe you can eat it.

(Students laugh)

T [>Ss] ; OK= Yes= That's all for today.= Have a nice day.

FIFTH CLASS HOUR

EXTRACT 4 PART 2 PRE- LISTENING ACTIVITY P: 188

T [>Ss] ; Good morning.

All [<T] ; Good morning.

T [>Ss] ; How are you today?
 Some [<T] ; Fine.
 Some [<T] ; Sleepy.
 T [>Some] ; You seem sleepy.
 Some [<T] ; Yes.
 T [>Ss] ; Does the weather effect you?
 Some [<T] ; Yes.
 T [>Ss] ; The weather, hih?
 Ss [<T] ; (No answer).
 T [>Ss] ; Is it really effective on you= #4 (sec) The outside factors, hih ? #3 (sec) For example: If you see the Sun #3 (sec) do you feel more #4 (sec) positive?
 Some [<T] ; No.
 T [>Ss] ; For example: If the weather is rainy #3 (sec) how do you feel=
 Some [<T] ; Bad.
 Some [<T] ; Hiç farketmez.
 T [>Ss] ; Worse.
 A few [<T] ; Romantic.
 T [>A few] ; Romantic.= OK= So, do you think the weather effect people in different way?
 Some [<T] ; Yes.
 T [>Ss] ; How #3 (sec) the weather may effect us? #4 (sec) What may be the other things that are outside?
 Ms6 [< T] ; People.
 T [>Ms6] ; People may effect us.= OK.
 Ms1 [< T] ;Holiday.
 T [>Ms1] ; Holiday.= OK= The Sun effects us, hmmm positively? #4 (sec) If we see the Sun, we feel positive hmm?= Do you know in #5 (sec) north countries let's say #4 (sec) countries which are close to the pole #4 (sec) north pole, #3 (sec) the rate of committing suicides is very high?= Committing suicide?
 Fs4 [< T] ; Teşebbüs #5 (sec) intihar.
 T [>Ss] ; You kill yourself, #3 (sec) the rate of it is very high.= Why?
 Some [<T] ; Sunny+...
 T [>Ss] ; What is missing in north pole?

A few [<T] ; Sunny+...

T [>Ss] ; Sun, hih? = In some parts of the world #3 (sec) there's 6 months night, hih? =
Would you like to live somewhere like that?

Some [<T] ; Yes.

T [>Some] ; Yeahh, really?

Ms? [<T] ; Yes, when the Sun is dark.

T [>Ss] ; Ok = All right = So #4 (sec) for 6 months you won't be able to see the Sun. = Is it
Ok for you, for the others? #4 (sec) It's Ok for them. = For the others?

Ms2 [<T] ; Yes, yes I prefer.

T [>Ms2] ; But most people won't prefer it. = How about moon? #3 (sec) Sun is very
effective on us. = Does moon has [/] lots of effects on us, too?

A few [<T] ; Yes, people+...

T [>Ss] ; OK #3 (sec) Today we're going to listen to a lecture about this #4 (sec) about
moon. = The effects of a moon and #3 (sec) we're going to listen to a debate.

(After giving some information about the structure of a debate, students listen to it).

APPENDIX 5
TAPESCRIPT TEACHER 3

FIRST CLASS HOUR
EXTRACT 1 WARM-UP

T [>Ss] ; How are you people?

Ss [<T] ; Fine thanks.

T [>Ss] ; Tired?

A few [<T] ; Yeaah.

A few [<T] ; Dreamy.

T [>Ss] ; Hmmm #3 (sec), do you remember the deal we made last week?

Ms1 [< T] ; For what?

T [>Ss] ; First hour we're going to do listening and then we're going to do the speaking. #4

(sec) Heyy, #5 (sec) I need an assistant please+... (one of the students helps with the cable)

Thanks. #4 (sec) OK (the teacher puts the cassette) #7 (sec) Do you remember that idiot?

Ms2 [< T] ; Hocam kamera+...

T [>Ms2] ; What?= He is idiot, #3 (sec) OK.= So, we're going to do the listening first. #4

(sec) But, before listening you have to do the vocabulary exercise.

A few [<T] ; Page?

T [>Ss] ; That would be p : 167+...

Ms3 [< T] ; 76.

T [>Ss] ; 76 right.= OK.= We have Jeff, Nancy, and Anna again. #7 (sec) Of course they are a part of the family, #5 (sec) now #3 (sec) dimi?

#4 (sec) So, who is Jeff here in the picture? (showing the picture on p: 176) #9 (sec) Who is Jeff? #3 (sec) Yes, #4 (sec) this is Jeff, this is Nancy here+/.

Ms2 [< T] ; Hocam sakal yapalım da anlaşılın.

T [>Ms2] ; OK.= #3 (sec) What kind of beard is it? = Let me see. #5 (sec) OK.= Who is this? #5 Jeff is pointing at something, #5 (sec) what is it?

A few [<T] ; Sun.= Sun.

T [>Ss] ; Sun+/.

A few [<T]; Clouds.

T [>Ss]; Sun, #4 (sec) maybe the clouds #6 (sec) maybe the moon, #5 (sec) maybe it's the moon.

A few [<T]; Maybe.

T [>Ss]; OK. #3 (sec) What are they looking at? #6 (sec) The moon? #4 (sec) Forest? = OK. #2 (sec) Who says forest? #4 (sec) Who says the moon?

Ms4 [< T]; Sky, hocam.

T [>Ms4]; Sky? #4 (sec) Why do you think they're looking at the sky? #4 (sec)

Ms5 [< T]; They see UFO.

T [>Ms5]; Ahh, #3 (sec) I didn't expect that answer. = Maybe+...

Ms3 [< T]; Rainbow+...

T [>Ss]; Soruyu geri alıyorum.

Ms1 [< T]; Yoksa iyice saçmalayacağız.

T [>Ss]; OK. #5 (sec) So, in this listening part, they are going to talk about space exploration. #4 (sec) space exploration?

Ms2 [< T]; Uzay keşfi.

T [>Ss]; Hah. #4 (sec) Is there life #3 (sec) on Mars. = Is there life in any other #3 (sec) planet. = Filan kind of+... That 's why they're looking at the sky like this. #5 (sec) Who said the sky?

Ms5 [< T]; Hocam UFO o yaa+...

T [>Ms5]; UFO mu= #3 (sec) Ben daha önce birkaç kez gördüm hiç ona benzemiyor. = So, let's skip it. =OK. = So, before we listen we're going to do this matching activity, OK?

(Point the p: 177, exercise 2)

SECOND CLASS HOUR

EXTRACT 2 "TRUE" OR "LIE" GAME

T [>Ss]; OK= #6 (sec) people+... #3 (sec) heyy, while waiting for the tape+... Ok, everybody is going to #3 (sec) tell something. #5 (sec) It can be a truth or it can #3 (sec) be a lie. #4 (sec) But #5 (sec) you have to be what? #3 (sec) Serious. = The aim here is to try make the others #3 (sec) believe in what you say, OK? #4 (sec) For example, #5 (sec)

heyyy #4 (sec) when I was attending secondary school I was a champion in #5 (sec) table tennis.

Ms1 [< T] ; You, really?

T [>Ss] ; Hey.= Hey. So, #3 (sec) who thinks this is correct, this is a truth? #4 (sec) OK, again. #5 (sec) It's hard to believe #5 (sec) it's strange but when I was attending secondary school #4 (sec) I was the first #2 (sec) I came the first in a competition about table tennis.= So, #4 (sec) if you think this is the truth, raise your hand. #5 (sec) 1-2. #3 (sec) If you think this is a lie, raise your hand.= Şimdi bu ne demek biliyor musunuz? Ben kazandım demek, çünkü çoğunuzu kandırmayı başardım.

A few [<T] ; Vay bee+...

T [>Ss] ; This was true, yeah.= But that wasn't when I was attending secondary school.= OK.= So, is that clear?

A few [<T] ; Yes.

T [>Ss] ; I'm going to choose somebody from the list and that person is going to tell something.

Ms2 [< T] ; I can't lie suddenly+/-.

T [>Ms2] ; You're not. #4 (sec) I mean you don't have to lie.= You can also tell the truth, OK?

(The teacher write some expressions on the board "It's weird/ strange/ funny, surprisingly, oddly enough.")

T [>Ss] ; OK.= I'm going to pick somebody from the list #4 (sec) and that person is going to tell something, OK? This can be a lie #3 (sec) or this can be something true about yourself.= The point is #4 (sec) make the friends believe, #4 (sec) OK? = Are you ready? (The teacher chooses one student from the list) You are the lucky person.

Ms5 [< T] ; Yes.

T [>Ms5] ; OK.= But you're supposed to use these (points the board), OK? We're waiting for your sentence.

Ms5 [< T] ; Yes. #4 (sec) I'm a+... (laugh)+/-.

T [>Ms5] ; We're waiting for you to say something, not+/-.

Ms5 [< T] ; I'm never fly.

(laugh)

T [>Ss] ; OK. Who thinks he is lying? #3 (sec) Hands up! #4 (sec) Who thinks he has been honest? #6 (sec) OK= So, is that a lie?

Ms5 [< T] ; Lie ,yes+/-.

T [>Ms5] ; Yani, #4 (sec) arkadaşım biraz gerçekçi ol. #5 (sec) Yalan söyle. #4 (sec) I've never flown before.= OK.= Just try to convince. #5 (sec) Do we have volunteers? = Who is next?

Fs1 [< T] ; It's hard to believe but #6 (sec) it is hard to believe hocam+...

(Students laugh)

T [>Ss] ; OK. #4 (sec) Ya bişey söyleyecem. #2 (sec) It's hard to believe. #4 (sec) But what?

Fs1 [< T] ; It's hard to believe.

(Students laugh)

Fs1 [< T] ; 3 years ago #3 (sec) I played in a football club in Ankara #4 (sec) for 2 months+/-.

T [>Fs1] ; Really? = Bak yalnız #4 (sec) for 2 months. #5 (sec) OK.= Who thinks she is lying?

A few [<T] ; It's a lie+...

T [>Ss] ; Now, who thinks she #4 (sec) is telling the truth?

Ss [<T] ; (No answer) #7 (sec)

T [>Fs1] ; Are you #3 (sec) is this the truth?

Fs1 [< T] ; Yes.

T [>Fs1] ; Hadi canım.

Fs1 [< T] ; Yaa+/-.

T [>Fs1] ; Did you score any goals ? #4 (sec) OK= Very nice lie #3 (sec) walla I believed. #5 (sec) Yes. (to another student)

Ms6 [< T] ; U was 120 kg before #6 (sec) one year and half.

T [>Ss] ; One year and #3 (sec) one year and a half ago #4 (sec) he was 120 kg. #6 (sec) Is he #3 (sec) heyyy, is he telling the truth?

A few [<T] ; Yes.

T [>Ss] ; 1-2-3-4-5 OK.= Who thinks he's lying? = Who thinks he's such a liar? 1-2-3-4-5-6-t...

Ms6 [< T] ; It's true.

(The teacher is shocked) #9 (sec)

(They continue the activity like this till the end of the class)

THIRD CLASS HOUR

EXTRACT 3 LISTENING FOR THE MAIN IDEA

T [>Ss] ; Let's go back to Jeff, #4 (sec) Anna and Nancy. #4 (sec) Listening for the main idea. #5 (sec) That would be on p: #4 (sec) 177+...So, first question. #3 (sec) "What benefits of space program did Nancy and Jeff mention?" (teacher reads from the book) #5 (sec) Number 2 "What is an advantage of living in a space colony?" p: 177 #4 (sec) Are you ready?

A few [<T] ; No.

T [>Ss] ; Who says "No"? #5 (sec) OK.= Are you ready? = OK.

(Students listen to the conversation)

FIFTH CLASS HOUR

EXTRACT 4 PART 2 LISTENING TO THE LECTURE (PRE- LISTEINNG QUESTIONS)

T [>Ss] ; Good morning.

Some [<T] ; Good morning, teacher.

T [>Ss] ; Have you brought the materials?

Some [<T] ; Yes.

T [>Ss] ; Now, we're going to check them, OK? = Do you have a pen in black or blue (to sign the attendance sheet) #8 (sec) So, how are you today?

A few [<T] ; Fine thanks, and you?

T [>Ss] ; Very fine, great+...#5 (sec) Have you brought the questions? #5 (sec) Ali, do you mind collecting them?

Ms4 [< T] ; Hocam kaç soru yazacağız?

T [>Ms4] ; Just one or two. #6 (sec) OK= Let's listen to the lecture part, exercise 4+... Are we going to see full moon today?

A few [<T]; Yes.

T [>Ss]; Maybe.+...

Ms2 [< T]; No= I think no.

T [>Ms2]; Really? OK #4 (sec) Tell me, do you know the story of a man who turns into #3 (sec) wolf #4 (sec) dimi? #4 (sec) During the full moon? Do you know the story?

Some [<T]; Yes.

T [>Ss]; What do you know about it?

Ms1 [< T]; A man became wolf+/-

T [>Ms1]; OK.= Thanks+/-

Ms1 [< T]; Then he started to #4 (sec) eat miydi?

T [>Ms1]; I don't know.

Ms9 [< T]; Eat and attack somebody+...

T [>Ss]; OK.= Does it have anything with the full moon? #4 (sec) Or does it become wolf only when he's angry?

Ms7 [< T]; Maybe angry. #5 (sec) It depends with full moon.

T [>Ss]; OK.= Thabnks.#5 (sec) There are people who think #3 (sec) that they are effected by full moon #3 (sec) ((some human))+/-

Ms6 [< T]; Superstitions+...

T [>Ms6]; This is different. #2 (sec) there are some people who think that we are effected by full moon, we act weird.= Weird?

A few [<T]; Tuhaf.

T [>Ss]; Strange, hih.#5 8sec) What do you think? Do you agree that full moon effects our body, feelings #3 (sec) and behaviours? #4 (sec) Do you think full moon regulates+...Regulate? Control+...

A few [<T]; Yes.

T [>Ss]; Yes, how?

Ms10 [< T]; By shining.

Ms8 [< T]; Astrology. #3 (sec) It makes us aggressive+/-

T [>Ms8]; Aggressive? #3 (sec) How do you know that?

Ms8 [< T]; (No answer) #6 (sec)

T [>Ss]; So, are we effected positively or negatively?

A few [<T]; Negatively.

T [>Ss] ; Why?

Ms5 [< T] ; X sometimes somebody comes.

T [>Ms5] ; OK= Shall we close the curtains?

Ms5 [< T] ; No.= Not now.

T [>Ss] ; OK.= So, how do you like full moon?= Do you hate it? #4 (sec) Like it?

Ms2 [< T] ; It's very shy.

T [>Ss] ; Is there anyone in the classroom with the idea that we're effected by full moon?

Ms10 [< T] ; I don't know about effect of full moon.

T [>Ss] ; Do you know what full moon is?

A few [<T] ; Ay.

T [>Ss] ; That's OK.#4 (sec) So, and lecture #4 (sec) sorry. = I won't lie to you, it is a kind of long lecture. #4 (sec) So, sorry about that.

(Students listen to the lecture)

EIGHT CLASS HOUR

EXTRACT 5 TALK IT OVER P: 183

Before starting doing the activity, the teacher asks a student to write the item from a list that she had prepared to the board.

T [>Ss] ; OK.= So, people #4 (sec) here is what we're going to do.= If you just listen #4 (sec) you are going to put those items in order of importance #3 (sec) OK?= From the most important one to the least important one first #5 (sec) and then you're going to take the list with you #3 (sec) and I'm going to form groups #5 (sec) of five, OK? #5 (sec) And then you are going to discuss it together, OK.= You should say I take this with us because it's such+...#4 (sec) this is not necessary because this is such a such, OK? #4 (sec) And then I'm going to give you the official ranking.= Official ranking?#4 (sec) So, let's see if you're going to survive #3 (sec) in a travel to the moon, OK?

(Students try to put the items in order) # 1 minute

T [>Ss] ; OK.= So, you have a list #3 (sec) right?

A few [<T] ; Yes.

T [>Ss] ; OK.= So, tell me which item is your #5 (sec) most important item?

Ms3 [< T] ; Two- 100 pound tanks of oxygen+/.

T [>Ms3] ; Tanks of oxygen.= Yes.= Who agrees with him, please raise your hand? #6

(sec) OK= Thank you very much.#3 (sec) What is your most important item? (to a student)

Ms1 [< T] ; Hmm, portable heating unit.

T [>Ms1] ; Portable heating unit. = Why? #5 (sec)

Ms1 [< T] ; because space is very X.

T [>Ss] ; So, which do you think is the least important item. #4 (sec) Just raise your hand,

OK? #4 (sec)

Ms6 [< T] ; I think first oxygen+/.

T [>Ms6] ; ((Least important one)) Right.

Ms6 [< T] ; OK.= Şu parachute.

T [>Ms6] ; So, parachute silk, OK.

T [>Ss] ; OK.= So, you are going to discuss the items in your groups. #5 (sec) OK= The least important item.

(Students discuss the item but their talk is incomprehensible)

after completing the ranking, the teacher gets the answer of the students as groups then she informs the students about the official ranking and in this way they complete the activity and the class.