

AMERICAN UNIVERSITY OF ARMENIA

College of Humanities and Social Sciences

Integrating Documentary Films and Environmental Education through English

A design project submitted in
partial fulfillment of the requirements for the degree
Master of Arts in Teaching English as a Foreign Language

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05/06/2014

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Integrating Documentary Films and Environmental Education through English

Be accepted in partial fulfillment for the requirements of the degree

Master of Arts in Teaching English as a Foreign Language

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ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my Graduate Committee for such a wonderful learning opportunity. Special thanks go to my adviser, Dr. Farrelly, and my reader, Mrs. Gasparyan for their constant support and valuable advice throughout the design and implementation of the project.

The support of my peers, my friends, my family and my boyfriend made the accomplishment of this project possible.

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EXECUTIVE SUMMARY

Combining the teaching of language and content is practiced worldwide and continues to gain wider applicability. Despite its popularity, there is no evidence that it has been implemented in Armenia.

This design project presents the design, implementation and assessment of a content-based course designed for intermediate-level students. Current environmental issues have been chosen as a theme for the course as there seems to be a lack of environmental education in Armenian schools. The course is organized around documentary films on various environmental topics. Documentary films have been chosen as text as they are educational, informative and shorter than feature films. The course is aimed at improving students' overall language competence, developing higher order thinking skills and raising students' awareness about issues related to the environment, developing a sense of ownership and global citizenship in terms of advocacy on ecological sustainability. The deliverables of the project include a detailed syllabus with course description, schedule, goals and objectives, assessment plan and grading rubrics for the course assignments, as well as ten lesson plans with all the teaching materials. I have also designed course assessment tools and provided recommendations based on my own observations and course assessment through questionnaires and focus group interviews.

The course was piloted with intermediate-level students at the Experimental English Classes of the American University of Armenia. The age of the students ranged between 12 and 16.

The results of course evaluation showed that, overall, it was a successful course and met the goals and objectives set during the course design stage.

CHAPTER ONE: SCOPE AND BACKGROUND

1.1 Background and Setting

Combining the teaching of language and content is currently practiced all over the world and continues to gain wider popularity and applicability. Content-based instruction (CBI) is in line with modern beliefs and understandings about effective language teaching. It has been reported to make learning a language more interesting and motivating as the learners use the language to fulfill a real purpose. CBI gives the learners the opportunity to acquire a language through learning about a content matter, rather than mainly focusing on the language itself. Thus, the main aim of CBI is to use the language to communicate effectively and gain content knowledge through the target language. It is this possibility of incidental learning that has claimed to make CBI such an attractive approach. CBI creates a space for meaningfully integrating the four language skills in the classroom, more closely reflecting real world interactions, which require the use of several skills simultaneously.

Furthermore, CBI courses make extensive use of authentic materials and resources, particularly audiovisual materials which have revolutionized foreign language teaching. Now that different kinds of video materials are easily accessible through the Internet and have been reported to motivate students, as well as to aid comprehension and confidence in speech, there seems to be no justification for not making use of them (Terrell, 1993; Weyers, 1999; Oddone, 2011; Soong, 2012). Nowadays, the Internet is also full of short videos that are more convenient to use in the EFL classroom. Documentary films, which are generally shorter than feature films, are quite promising language learning tools if applied in a proper way. They have a carefully

prepared language delivered in Standard English, they are educational in nature, and provide good content for theme-based courses.

1.2 Problem Statement

Although CBI is practiced all over the world, there is no evidence that it has been piloted and carried out in Armenia. Use of video materials is also very limited or totally absent in Armenian classrooms. One of the many reasons may be the lack of necessary equipment and financial resources allocated to schools. Another reason could be the few school hours dedicated to English classes (mostly, two hours a week). Lack of teacher training and lack of awareness about innovative language teaching practices both among teachers and school administration may also serve as reasons for the current situation. Though the Ministry of Education of the Republic of Armenia and the National Institute of Education are trying to carry out some reforms, these do not seem to be observable enough yet.

Why should we have this situation when the current international research on effective approaches to language teaching and the rich variety of technological tools can make the English lesson so engaging and motivating for students?

1.3 The Purpose of the Project

This paper presents the design, implementation and assessment of a content-based course developed for intermediate and upper-intermediate level students in the Experimental English Classes at the American University of Armenia. The course is organized around theme-based documentary films and aimed at improving the overall language competence of the students, developing higher order thinking skills and raising students' awareness about issues related to the environment and global citizenship in terms of advocacy on ecological sustainability. This

particular topic has been chosen because there seems to be a lack of and disregard towards environmental and global citizenship education in Armenian schools. The findings of the design and implementation of this course might help determine if it is worth introducing courses of this nature in Armenian schools or language programs. If the findings are supportive, all the teaching materials can be shared with stakeholders.

CHAPTER TWO: LITERATURE REVIEW

2.1 Defining Content-Based Instruction

Teaching content through the medium of a second or foreign language is a widespread practice. Content-based instruction (CBI) has been defined as an approach to teaching a second or foreign language in which content shapes the teaching, rather than the linguistic syllabus (Richards and Rodgers, 2001). As Krahnke (1987) puts it, "It is the teaching of content or information in the language being learned with little or no direct or explicit effort to teach the language itself separately from the content being taught" (p. 65, cited in Richards and Rodgers, 2001).

In CBI, the language is viewed as a tool for learning content. CBI puts a stress on language use and intends to integrate language learning and cognitive development (Lyster, 2007).

Approaches integrating language and content have been labeled differently, with content-based instruction being the most popular in North America. The natural consequence of CBI, content and language integrated learning (CLIL), appeared in the 1990s in Europe and has since gained wide popularity (Teddick and Cammarata, 2012). Apart from being an approach to language and content teaching, CLIL also represents prominent educational reform spreading its influence to countries around the world (Tedick and Cammarata, 2012). Up to now there has unfortunately been little collaboration among CLIL and CBI scholars. As there are no clearly defined differences between CBI and CLIL, we will use both terms interchangeably throughout this literature review.

A range of models of CBI have emerged to fit specific settings and educational contexts. In this respect, Georgiou (2012) points to a danger of this approach losing its basic characteristics by which it became known, or being applied in an inappropriate manner, thus causing disappointment. Hence, Georgiou has tried to distinguish the basic principles of CBI. One of them is its content-driven nature. Although the balance of attention to content and language may vary, the expectation is that content and language will be treated equally. Here it is worth mentioning about the warning of Met (1999) that CBI is not a unitary approach to language and content instruction. According to Met, CBI is a continuum with its different types located along the continuum from content-driven instruction to language-driven instruction. Cenoz, Genesee, and Gorter (2013) call the language-driven approach an "alternative rendition" of CLIL which views content as a tool for second or foreign language teaching and learning. Another CBI principle mentioned by Georgiou (2012) is the unique educational methodology that the implementation of CBI requires. It is a mix of language learning methodology and mainstream subject area methodology. Given the complexity of CBI, it should be mentioned that many researchers (Cenoz, et. al., 2013; Georgiou, 2012) stress the importance of refining the definition of CBI in ways that will acknowledge the diversity of its formats.

2.2 Theoretical Foundations of CBI

CBI is generally thought to have originated from language immersion programs in Canada in 1965 (Tedick and Cammarata, 2012). CBI is based on a firm theoretical framework that allows us to view it as having a potential to be a successful learning approach (Georgiou, 2012). CBI has been described to draw on basic characteristics of communicative language teaching (CLT). The proponents of the CLT approach claim that the focus of classrooms should be on authentic communication and information exchange. A perfect situation for achieving that end would be

one where the point of departure for language teaching is content, rather than a language-based unit (Richards and Rodgers, 2001). CBI claims to adopt basic characteristics of CLT by providing opportunities for authentic and meaningful communication, active learning and exposure to increased foreign language input (Richards and Rodgers, 2001). In these situations students learn through doing, rather than viewing the teacher as the main source of language input and information. CBI also contains some characteristics of task-based learning in that the focus is on real content-learning tasks instead of the language itself. This in turn promotes incidental learning (Georgiou, 2012).

Some support for CBI is provided by second language acquisition research, specifically by Krashen, Swain and Cummins. Krashen (1982) argues that the language can only be acquired incidentally through comprehensible input and that the level of input must be slightly beyond the student's language competence level in order for information to be acquired (i.e. $i+1$). This theory, which Krashen has named the Input Hypothesis, has provided support for the application of CBI. The first reason is that CBI classes are more contextualized than language classes, and, thus, it seems to be easier for comprehensible input to take place. Besides, when the communication is purposeful, when there is enough comprehensible input, $i+1$ will occur automatically (Krashen, 1982). Hence, the task of CBI teachers is to ensure that input is not too challenging for the learners and that appropriate scaffolding is provided. Lightbown and Spada (1999) also confirm that CBI is based on interaction and purposeful use of language, and, hence, is in accordance with Krashen's theory. With regard to speaking fluency, Krashen claims that it is mostly achieved through comprehensible input because output itself does not ensure learning. It only provides "a domain for error correction (1982, p.61). However, Swain (1993) has proposed her output hypothesis which claims that student learning depends on direct attention to

productive language skills. These findings have led to more attention to language learning activities.

Another theory that CBI supports is Cummins's (1984 as cited in Grabe and Stoller, 1997) notion of Cognitive Academic Language Proficiency (CALP). Cummins argues that basic interpersonal communication skills that traditional language classes develop are not enough for students to succeed in academic learning. As developing cognitive academic language proficiency takes a long time, interdisciplinary content instruction should start as soon as possible. Grabe and Stoller (1997) view the language of CALP as the language of academic content areas, thus proposing that a CBI approach could be the best way for learners to develop CALP.

CBI is also supported by sociocultural and constructivist views on language learning. These views consider the nature of language learning as a social process in which participants interact and construct social practices by means of which and in which language learning occurs (Block, 2003 as cited in Dalton-Puffer and Nikula, 2006). Some researchers like Lantolf and Poehner (2005) have illustrated that Vygotskian concepts like interaction in the Zone of Proximal Development (ZPD), internal speech and sorting out input are crucial for second language learning. In CBI, the focus is also on the learners' development and scaffolding of knowledge by means of interaction with their peers, their teacher and the materials, enhancing knowledge at increasing levels of complexity.

Research in educational and cognitive psychology also offers contributions to promoting CBI as an effective approach. Among these are: cognitive learning theory, depth of processing research, discourse comprehension processing research, and motivation and interest research

(Grabe and Stoller, 1997). The cognitive learning theory maintains that learning occurs in several stages. In the cognitive stage, learners develop language skills by solving simple tasks with the language and any concept they meet. In the associative stage, error correction occurs and connections to related declarative and procedural knowledge are enhanced, and proceduralized knowledge dominates. In the autonomous stage, tasks are performed automatically and autonomously requiring minimal deliberate attention (Anderson, 1983 as cited in Grabe and Stoller, 1997). Depth of processing research also contends that coherent and meaningful information that allows for student-produced elaborations and setting connections between ideas helps learners to improve memory and recall of information (Anderson, 1990a as cited in Grabe and Stoller, 1997). The above-mentioned results seem to support the use of CBI because the approach, by its very definition, is about being exposed to coherent content multiple times, it is about use of visual materials, more complex learning activities. In addition, as Rodgers (2001) mentions, successful learning takes place when the information acquired by learners is useful, perceived as interesting and resulting in the accomplishment of the set goal. Moreover, intrinsic motivation can be driven by interest in content information and may result in better learning. A theory of intrinsic motivation, called "flow" theory claims that learners reach the state of happiness when tasks are at higher levels of complexity and represent higher challenge (Shernoff and Csikszentmihalyi, 2009). This results in enhanced concentration on the task, a total engagement in the activity, loss of awareness of time.

2.3 Models of CBI

The paradigm shift from a form-focused (structural) syllabus to CBI caused a lot of ambiguity and uncertainty about how and when explicit attention should be given to language (Bigelow, Ranney, and Dahlman, 2006). However, though CBI began as a rather unshaped

approach with unclear notions of content-based language learning, research over the years has sorted out a variety of program models that differ by teacher specialization (i.e., language or subject teacher), content type (i.e., academic versus thematic content), role of content and language (i.e., focus on subject matter content vs. language) and intensity (i.e., time allocated to carry out the approach) (Tedick & Cammarata, 2012). The scope of this chapter does not justify exploring all models of CBI, however, we will just look at description of models of CBI based on the roles attached to content and language. Met (1999) has made a useful description of CBI models by placing them on a continuum stretching from content-driven to language-driven models. In content-driven models, content learning is the most important part, and language learning has a secondary role. Language objectives are just aligned to the objectives of the content. On the other end of the continuum, there are the language-driven models where content is a tool used to learn a second or foreign language and the focus is on language objectives and assessment of language outcomes. Richards and Rodgers (2001) distinguish between theme-based language instruction, sheltered content instruction, adjunct language instruction and the skills-based approach. Theme-based language instruction is described as a course in which the syllabus is based on themes and topics. The topics are introduced and touched on by different language activities focusing on all the four language skills, and most of the materials are produced or gathered by teachers. Davies (2003) argues that theme-based CBI works well in EFL contexts and calls for teachers to continue designing relevant syllabi. Sheltered content instruction courses are taught by subject matter specialists. The emphasis is on content and, in general, texts are chosen to suit the level of the learners. In the adjunct language instruction model students attend two interconnected courses – a content course and a language course. The same content base is taught in both courses and tasks and assignments are mutually coordinated.

A variation of the adjunct model can be the team-teach approach (Shih, 1986 as cited in Richards & Rodgers, 2001). The skills-based approach emphasizes an academic skill (e.g. academic writing). Bigelow et al. (2006) propose the so-called Connections Model which is characterized by the belief that language objectives should be translated into language structures and functions and tied to content. Explicit attention should be given to structures and functions. In this case it will be possible to reach a balance between content and language in the curriculum. The model also argues for explicit instruction of learning strategies which connect content, structures and functions.

2.4 Research on CBI Program Outcomes

Content-based instruction has aroused a considerable amount of research interest since its inception partly due to the firm theoretical framework upon which it is based. Research on the effects of CBI has generally produced positive results and has touched on various aspects. Positive results have been reported both for students' content learning and language learning in CBI classes (Dalton-Puffer, 2007). Since my design project is more language-oriented, I will mainly discuss research results concerning second or foreign language development. Research on immersion programs has shown that immersion students have demonstrated higher levels of functional language proficiency than non-immersion students who have second language as a separate subject (Lyster, 2007). However, it should be mentioned that the initial research conducted from the 1970s to 1990s revealed that immersion students improved receptive skills more than productive language skills (Harley, et al., 1990 as cited in Tedick & Cammarata, 2012). Based on the aforementioned research, many CBI programs have started to put more emphasis on productive skills. In his paper, Adamson (2006) has described the teaching of the CBI course on sociolinguistics to Chinese and Japanese second year students in a college in

Japan. The EFL teacher used a combination of teacher input and student collaboration to teach the subject. The emphasis was on student collaboration, the so-called "collaborative dialogue" (Swain, 2000, p.97 as cited in Adamson, 2006). The results of the study show that besides raising the comprehension level of the class and ensuring classroom interaction and active participation, the methodological combination also reported lower anxiety. Swain and Lapkin (2008) investigated the vocabulary learning of 8th grade French immersion students by means of tasks requiring collaboration. The study found that learners noticed lexical deficiencies in their knowledge during collaborative writing and obtained new vocabulary during activities. One of the recent studies on the contribution of CBI to Turkish young learners' English language development has found that a theme-based CBI model has resulted in improved language skills of the pilot group (Kiziltan and Ensanli, 2007). It is worth mentioning that the themes were chosen by the group and, thus, resulted in increased motivation and engagement. The empirical study by Varkuti (2010) which compared the English language achievement of CLIL secondary students and non-CLIL intensive foreign language learners concluded that CLIL students are more skilled in using their wide lexical knowledge in different contextualized conversations, as well as paying attention to coherence, grammar and sociolinguistic context. CLIL students also exceeded the control group in terms of cognitively challenging language proficiency and metalinguistic awareness. There also exist some longitudinal studies comparing CLIL and non-CLIL language performance. Alonso, Grisalena and Campo (2008) studied the performance of CLIL and non-CLIL high school learners of English as a third language in Spain by employing Cambridge ESL tests. The research findings claimed that CLIL groups performed better than non-CLIL groups. They also reported that differences between the groups increased over time. According to the findings of studies on speaking in CLIL courses, CLIL students often produce

more fluent, rich and creative speech and are distinguished by higher risk-taking (Naiman, 1995 as cited in Dalton-Puffer, 2007). There have also been studies that focused on the development of writing in CLIL courses, and the research findings are quite interesting. Vollmer, Helmut, Heine, Troschke, Coetzee, Kuttel (2006 as cited in Dalton-Puffer, 2007) and Llinares and Whittaker (2006, as cited in Dalton-Puffer, 2007) have studied the written performance of secondary school students in social science subjects. The findings have shown that the writings lacked cohesion, coherence to grammar and proper style. Dalton-Puffer (2007) suggests this could be due to the minor role of writing in the particular CBI context which naturally resulted in weak written performance by students. This implies that the structures of classroom discourse are crucial for learning outcomes. Having this in mind, it should be argued that CBI pedagogies deserve more attention.

2.5 CBI Pedagogies

Teachers play a crucial role when interacting with learners in CBI settings. Researchers are starting to realize that there is a need to investigate teachers' practices in integrating language and content (Tedick and Cammarata, 2012). Dalton-Puffer and Nikula (2006) have investigated the interconnection between teacher questions and student responses in Finnish and Austrian classrooms where they observed an overwhelming majority of minimalist answers by students. After close observation of research results, they claimed that questions targeting facts got minimalist answers, while the questions for opinions and beliefs resulted in more complex student answers. Dalton-Puffer and Nikula also suggest that hands-on, small-group activities help learners use directive speech acts productively not only with the teacher but also with each other. Mariotti (2006, as cited in Dalton-Puffer, 2007) also claims that teachers can withdraw more elaborate comprehensible output from their students if they are trained to do so. In their

Chinese study, Kong and Hoare (2011, as cited in Tedick and Cammarata, 2012) explored CBI pedagogies that fostered students' cognitive engagement with academic content, which would eventually result in academic language development. The results of the study revealed that the teacher's use of challenging content and ability to help learners deal with that content correlated positively with students' cognitive engagement. Based on her studies (Dalton-Puffer, 2006, 2007) and research by colleagues, Dalton-Puffer came to the conclusion that CLIL has a high language learning potential but, in fact, is not reaching it. In this respect, teacher training and education are crucial for successful implementation of CBI. Horn (2011) argues that there are four aspects crucial for EFL teachers to implement CBI successfully. These are teachers' language proficiency, academic skills, pedagogical knowledge and content-language interface skills. According to Horn, none of these aspects should be disregarded neither by teachers, nor by the administration of the educational institution where CBI is going to be practiced. Several studies have revealed that the most successful teachers were those who were trained as both language and subject teachers (Milne and Garcia, 2008; Wannagat, 2007 as cited in Tedick & Cammarata, 2012). Hence, teacher training and experience are keys to the successful implementation of CBI in classrooms.

2.6 Concerns About CBI and Implications for Future Research

There has been extensive research on CBI since its emergence as an approach. Studies on CBI have generally rendered positive results and have been reported to improve language and academic skills of students, as well as content knowledge. However, scholars warn us that studies on the effectiveness of CBI often do not provide a clear causal relationship between integrated language and content teaching and student outcomes (Cenoz et al., 2013). The limitation of this kind of studies consists in that CBI instruction generally includes additional

contact hours with the target language (i.e. content-based classes plus regular foreign language classes). Thus, the increased amount of exposure could be the cause of language improvement, rather than the CBI format itself. There is very little research on actual teaching and pedagogy taking place in classrooms. There is also a growing need to look for effective ways to integrate more language-focused instruction as it has been reported that not enough attention has been paid to accuracy in CBI programs (Tedick and Cammarata, 2012). Dalton-Puffer and Smit (2013) propose that action research should be part of CBI implementation in order to transfer knowledge and practices to local education contexts. Finally, Cenoz et al. (2013) argue that the most significant direction for future research is investigating effective ways of integrating language and content. To achieve this goal, research should go beyond just looking at the level of second language competence due to CBI instruction to how the actual teaching works and how it can be improved. Classroom research would be an invaluable tool for answering the aforementioned questions.

2.7 Using Authentic Video in the Classroom

The traditional second or foreign language curriculum is based on the textbook with grammar rules and exercises, reading texts, vocabulary, writing tasks (Herron, Morris, Secules and Curtis, 1995). According to Shyamlee (2012), the traditional way of teaching turns learners into passive absorbers of knowledge and, thus, makes it difficult to reach the target of communication. At the same time, Shyamlee mentions that in no ways do traditional ways of teaching harm the learners. Rather, they are proved to be useful too. However, there are more opportunities for learners to develop language skills and become more confident. A solution, according to Shyamlee, is using authentic materials like films, radio, TV as technology makes learning more engaging and more productive. According to Secules, Herron and Tomasello (1992), video allows language learners

to see the interaction between native speakers in authentic situations in which they use different accents, registers, gestures. Currently, textbook authors and publishers strongly encourage teachers to use video in the curriculum (Herron, et al, 1995). Sherman (2003) mentions several reasons why authentic video should be used in the classroom. The first reason is the accessibility of video materials on TV, on the internet, in shops. As watching videos entails seeing and hearing at the same time, the interest in the meaning of words increases. Some other important reasons mentioned by Sherman are the opportunities for a fuller comprehension of the spoken language thanks to contextual aids, the video materials representing a language model for learners to follow, cultural awareness raising. Bahrani and Shu Sim (2012) add that authentic language material helps learners to make connections between the world of their classroom and the real world outside. Sherman notes that the main complaint about authentic video is that it can be too challenging. There are several factors that make comprehension difficult. Among many factors, Sherman mentions the proficiency level of the students, the large number of words, speech rate, background noise, dialect or accents. According to Martinez (2002), the authentic materials used in the classroom can be too culturally biased. Besides, the vocabulary might not correspond to the learners' needs. Regarding the verbal and lexical density, however, the research findings by Webb and Rodgers (2009) indicate that “knowledge of the most frequent 3.000 word families plus proper nouns and marginal words may provide 95% coverage of movies” (p. 424). According to the researchers, it may be enough for acceptable comprehension and incidental learning to take place. But they also admit that specific genres of language may result to be more difficult to comprehend than others. Besides, they also take into account the factors mentioned above that affect comprehension of the video. According to Oddone (2011), in spite of the initial

confusion when listening to native speakers, it seems that students understand words and utterances better when these are supported by images or actions.

Sherman also warns us that videos do not have to be central to the teaching. They can be utilized for triggering discussions, or serve as a pre-writing activity. In other words, videos can be used as advance organizers. The study by Hanley, Herron and Cole (1995) compared the effects of using a video as an advance organizer to writing versus using pictures and teacher narrative. The results of the study showed that students in the video condition displayed significantly higher level of comprehension and retention of the written passage than the students in the pictures + teacher narrative condition.

Research targeting the use of video materials as the central focus in the classroom has generally yielded positive results. The results of the longitudinal one-year study by Herron, et al (1995) aimed at comparing the effects of video-based and text-based teaching has shown a significant difference of performance on the listening comprehension test between the experimental (i.e. video) and control (i.e. text) groups. The findings of this study regarding the improvement of the writing skills is worth mentioning. In fact, the study revealed that the experimental group tended to outperform the control group, thus revealing an intricate connection between the improvement of listening and writing skills. As for the reading and speaking skills, the study showed no significant difference in the performance of the two groups. Weyers (1999) conducted a study to examine the effect of authentic Spanish telenovela (i.e. soap opera) on the listening comprehension of the students, and, most importantly, to check the validity of Krashen's Input Hypothesis (Krashen, 1991). The hypothesis claims that the quality and quantity of output largely depends on the quality and quantity of comprehensible input that students receive and process. Weyers's research data reported that the Spanish language

telenovela had a positive effect on students' listening comprehension skills, as well as on only some component parts of communicative competence. Particularly, there was an increased confidence in speech and detail in narration through the use of greater number of words for the experimental group as compared to the control group. The finding related to increased confidence supported the previous results reported by Terrell (1993). The learners in Terrell's study also reported increase of self-confidence and having fewer cases of hindrances in using the target language. The study by Secules, Herron and Tomasello (1992) investigated the effect of the use of a total multi-media instructional package in the beginner level French language classroom. The study reported on two experiments comparing video materials representing native speakers in daily situations managed by the teacher to more traditional teaching with classroom exercises and drills. The first experiment looking at students' test results on listening comprehension revealed that learners in the video-based teaching outperformed learners in the traditional curriculum. The second experiment compared these two methods in terms of teaching specific vocabulary and grammar structures. As for grammar structures, results displayed no significant differences between the experimental and control conditions. However, the control group remembered the vocabulary tested one week after the presentation better than the video-based group. Anyway, as the researchers claim, this may not ensure long-term retention of vocabulary.

The research study by Bahrani and Shu Sim (2012) was carried out to compare the effectiveness of news, cartoons and films as three types of authentic material on enhancing the language proficiency of low level English language learners. The post-test results revealed that the students in the 'news' group did not improve their language proficiency in contrast to the students in the 'cartoons' and 'films' groups who recorded improvement in their language

proficiency. However, the researchers warn that the experiment was carried out with low proficiency level students and, thus, different results could be obtained with higher level students.

The study by Oddone (2011) looked at the possibility of raising students' motivation for learning English in a CLIL classroom. According to Oddone, the use of videos in CLIL may help greatly in dealing with both the language and the content. The participants of the study initially didn't see any reason in learning English. The researchers started with providing students with tools to be able to understand oral language in the videos. The learners were supposed to develop strategies for independent learning and collaboration with their peers. The tests administered towards the end of the course displayed better overall performance by learners in terms of both language forms and skills. Self-assessment questionnaires showed a higher level of confidence working with foreign language materials. Regarding motivation, learners reported watching videos at home using the strategies they had practiced in class because they wanted to enhance their language skills. This study shows that it is very important to use videos appropriately and with careful scaffolding to achieve the desired end. Choosing the proper type of video for reaching specific language and content objectives is also crucial.

2.8. Use of Documentary Films in the Classroom

The potential of documentary films as teaching materials is huge and needs future investigation (Soong, 2012). According to Bernardo (2011), documentary films can be a perfect addition to classroom instruction. Documentary films expose learners to real life language and real situations. Soong (2012) considers documentary films to be more appropriate than movies because they refer to particular topics and their primary function is providing useful knowledge.

Sherman (2003) calls documentaries "the TV version of a newspaper or magazine article" due to their feature of providing facts and opinions about specific subjects. According to Tafani (2009), students can learn about different disciplines through documentary films. Winton (2010 as cited in Bernardo, 2011) argues that documentaries are invaluable means that teachers can use to raise different questions and issues, and lead learners to understand and analyze them. Another advantage of using documentaries for educational purposes is that they are delivered in Standard English, and teachers do not have to worry about encountering any inappropriate expressions found in popular movies (Soong, 2012). Besides, documentary films are generally shorter than feature films and the pace of speech is slower. Apart from improving students' listening comprehension, documentary films also provide repeated encounters with the key vocabulary items. The results of the action research carried out by Soong (2012) revealed that the overwhelming majority of his students enjoyed documentary films in their oral interpretation class. It was also found that students preferred to have no more than 20-minute watching sessions per class. The results of the aforementioned study suggest that it is a good idea to choose short documentary films or break up longer ones between class sessions. Besides, as with any type of video, a careful pre-watching, while-watching and post-watching activities should be integrated as the aim of watching the films is to learn language and content, rather than be entertained.

2.9 How to Use Video in the Classroom

The research results mentioned above indicate that course designers or teachers have to take important decisions before introducing the video in the teaching. Teachers should carefully select video materials to meet the goals and objectives of the course (Canning-Wilson, 2000 as cited in Oddone, 2011). According to Oddone (2011), teachers are responsible for creating a learning environment by organizing activities and tasks in the way that will encourage learners to

participate. The video-watching should be preceded by brainstorming and prediction activities. Teachers might need to work on the vocabulary for facilitating understanding of the text in the video. Discussions or reports can follow the video, or students can prepare talks or presentations (Sherman, 2003). Fisher and Frey (2011) also suggest that films need disruptions with discussions, writing activities, vocabulary. In this way, they argue, learners will be able to make better use of their knowledge of the content to understand, analyze and evaluate the videos. The study by Herron (1994) looked at the effectiveness of giving background information (i.e. an advance organizer) for enhancing learners' listening comprehension of the video. The results of the study revealed that learners' comprehension of the video was enhanced by introducing them a short written summary of the main happenings in the video. These findings seem to confirm what effective teachers have known intrinsically. Qiang, Hai and Wolff (2007) also conducted a study to argue for the appropriate use of movies. Based on the results of their study, the researchers suggested three necessary conditions for organizing a successful movie course. The first condition is using educational, informative and engaging movies. The second condition is preparing the learners before watching the movies. And lastly, the researchers suggest using activities that will elicit output both in oral and in written forms.

Cohen (2009) calls the above-mentioned ways of providing support "traditional classroom movie practices" (p. 104). Recognizing the value of the traditional practices, Cohen also points at problems related with these. Particularly, she argues that the traditional classroom misses the opportunity of "developing a critical apparatus for reading media" (p. 104). Instead of exploring the rhetorical purpose related to who the intended audience is, what the purpose is, what the expectations of the author from the audience are, how the learners' personal experience relates to the author's conclusions, students are just limited to the framework imposed by the teacher.

Cohen argues that the teacher's main objective should be engaging learners in interconnected communicative activities that will make use of learners' synthetic, analytical and abstraction skills to be able to reorganize and interpret the information. These activities will, in their turn, foster learners' intellectual curiosity, motivation and self-confidence. Eken's study (2003) can be considered an implementation of Cohen's principles. Eken designed a 14-week undergraduate "Media Studies" course for applied linguistics students. The first stage of the course concentrated on the deconstruction and analysis of popular films, and the second stage focused on students' preparing and implementing a film workshop in groups based on the knowledge they obtained during the first stage. The interviews with students revealed that the workshop seemed to develop their critical thinking skills, confidence when talking in front of other people. Regarding language skills, students reported that they were able to practice English meaningfully by reading, speaking, listening and writing. Students also reported to have learnt some new vocabulary items. On the contrary, Stewart (2006) argues that when using movies to teach English, students should be warned that it is not a film studies course. Otherwise, the students' attention to language may be reduced. However, Stewart does not bring any empirical evidence to support his point.

The researchers who are in favor of analyzing the text of the video critically claim that video production could be a very effective way of doing it (Lund, 1998).

2.10 Video Production in the Language Classroom

With the development of video-editing software and the emergence of cheap cameras, the role of learners as mere audience has naturally been revisited (Fisher and Frey, 2011). Learners are able to create their own videos to show their perceptions of the content they have explored in

the classroom. According to Lund (1998), the process of designing and creating their own videos also helps learners to critically analyze media, that is, develop media literacy skills. Lund (1998) claims that the process of producing a video may also help the teachers to reach the goals of language arts proficiency and learner self-realization. Lund also suggests that language teachers do not have to be professionals in the video production sphere. Looking through some teaching guides and watching tutorials might be enough to guide the students in the video production process. According to Fehlman (1996), each stage of the video production process should involve learners in integrating all the language skills. If learners work together as a team of video-makers, they engage in collaboration and do their best not to undermine the collective effort of the group. It is in these cases that students find out their own strengths, their self-esteem is enhanced as they don't have the teacher next to them who is the leader and the guide. Shrosbree (2008) also claims that video production projects can be highly motivating assignments for students. Lund (1998) suggests that in the pre-production process students can be asked to write the script and the storyboard to determine how the story will go. Learners' intrinsic motivation to speak without grammar or pronunciation errors increases during the shooting process. As Lund argues, this is because they see themselves on the camera and know that the final product is going to be public. According to Shrosbee (2008), there is a large potential audience for students due to the popularity of such video sharing websites as Youtube.com or different blogs. Lund (1998) reports on her video production project with inexperienced teachers and high school students (Lund, 1995 as cited in Lund, 1998). The interviews with students revealed that they enjoyed investigating real world problems through the video production process. Though students reported not to enjoy the writing part of the pre-production stage, they acknowledged its value. Bernardo (2011) reports on the results of the

documentary project in which students were supposed to produce short documentaries in three stages- pre-production, actual production, and post-production. The reflections by the students revealed that documentary projects encouraged them to use technology, work in cooperation with their peers, use critical thinking skills, as well as skills of analyzing and synthesizing information. Students reported that watching and producing documentary films raised their awareness of various issues. Bernardo adds here that using documentary films (i.e. both watching and production) can be especially effective in content-based classes where different subject area courses are taught through English.

2.11 Implications for the Design Project

The current design project has intended to make best use of the research findings discussed in this literature review.

First of all, a more language-driven model of CBI has been chosen to guide the design of the whole project after a careful examination of different models of CBI. The reason is that the main aim of the target audience for this course is learning language in the first place.

As CBI has been reported to have some characteristics of such approaches as communicative language teaching and task-based learning (Richards and Rodgers, 2001; Georgiou, 2012), some specific activities have been selected for the design project that best reflect the philosophy of these approaches (discussions, debates, jigsaw activities, presentations, video-production projects).

CBI is also in line with Krashen's Input Hypothesis (Krashen, 1982). Thus, the design project aims to provide a lot of comprehensible input to students by means of both documentary films and readings.

Documentary films have been chosen as text because they are educational in nature, the language used is Standard English and the pace of speech is generally slower than in other feature films (Sherman, 2003; Soong, 2012). Based on the findings of the literature review (Soong, 2012), it has been decided to include documentary films that do not last longer than 20 minutes, or break up the long films into two watching sessions.

Some suggestions on how to use videos in the classroom have also been used in the design project. Particularly, it has been decided to work on students' vocabulary before watching the documentary films (Oddone, 2011; Sherman, 2003), as well as accompany the video-watching with pre-watching activities to prepare students for watching the video, and post-watching activities to elicit oral and/or written output from students (Qiang, Hai and Wolff, 2007; Herron, 1994).

The course has also included a video-production project as an assignment as such projects have been reported to be highly motivating for students (Shrosbree, 2008). They have also been reported to improve technology and media literacy skills (Lund, 1998) and foster student collaboration (Fehlman, 1996).

CHAPTER 3: PROPOSED PLAN AND DELIVERABLES

3.1 Course Description

The content-based course entitled "Exploring Environmental Issues through Video" was designed for intermediate and upper-intermediate level students of the Experimental English Classes (EEC) program at the American University of Armenia. EEC has been offering its services to schoolchildren interested in developing their English language skills since 2005. The aim of the EEC classes is to give schoolchildren the opportunity to learn English through communicative methods of teaching, provide practicum and independent teaching experiences to MA TEFL students, and provide a space for research in EFL teaching.

The course has been designed to last ten weeks with 120-minute class meetings once a week.

3.2 Needs and Environment Analysis

To discover the needs and wants of the EEC students, needs analysis was conducted through a questionnaire survey and a textbook review. The textbook review addressed the needs of the EEC intermediate and upper-intermediate students, while the questionnaire targeted the wants of the students. Thirty-five intermediate and upper-intermediate level students from five EEC classes responded to the questionnaire.

Referring to lacks, the textbook review revealed that students lack more extended opportunities to listen to authentic language and meaningful content, practice reflective writing using higher order skills, and practice value-based learning.

Thirty-five intermediate and upper-intermediate level students from five EEC classes participated in the questionnaire survey aimed at discovering the wants of the students. All the participants of the survey expressed their willingness to learn English through watching videos. Most of the participants reported that they would like to discuss films after watching them and more than half answered they would also like to write blog reflections on the films they watched. The recurring topics of interest among survey participants were environment, travelling and culture.

The questionnaire also addressed the environmental factors that could affect the design of the course. The student answers revealed that they have few opportunities to practice English outside of the classroom. It was also found that all the participants of the survey have internet access at home, and that they were willing to allocate two-three hours a week for taking the course.

3.3 Course Goals and Objectives

By deciding on the goals for the course, we determine what we want our students to learn. Having clear goals and objectives allows us to decide what content and materials to integrate in the course, what approaches and methods to use and what kind of assignments to include for measuring specific goals and objectives.

In designing the goals and objectives for my course, I have relied heavily on the literature on approaches and methods in language teaching that have proved effective, as well as on my own teaching philosophy.

My vision of successful learning is teaching students to evaluate the content they are exposed to apart from raising their awareness about it. This way we develop active learners who interact with content. One of the main aims for this course has been integrating the content

knowledge on environmental issues with constant critical analysis and evaluation of information. Another approach that has been informed by my personal beliefs and by literature is developing autonomous and self-directed learners by equipping them with skills and strategies they will be able to use throughout their lifelong learning process. This is the reason why the goals I have chosen are mainly aimed at teaching particular skills like summarizing and synthesizing information, writing reflectively, making effective presentations, using listening and reading strategies for decoding texts effectively. As the main aim of the target audience for this course is learning the language, specific goals targeting linguistic knowledge, particularly vocabulary, have been included in the course goals.

The grid below represents the course goals and learning objectives using the KASA (i.e. knowledge, awareness, skills, attitudes) framework (Graves, 2000).

COURSE GOALS	COURSE OBJECTIVES By the end of this course students will be able to:
<p>GOAL 1: Raise awareness of the environment-related issues to introduce related values and develop a sense of ownership and global citizenship.</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Recognize current environment-related issues (Knowledge) 2. Identify examples of global citizenship in terms of advocacy on ecological sustainability (Knowledge) 3. Evaluate ethical values related to the world surrounding us (Attitude) 4. Identify the value of team work and cooperative learning through group projects (Attitude) 5. Identify and use vocabulary related to the environment (Knowledge)
<p>GOAL 2: Develop self-confident and autonomous learners by enhancing digital literacy and technological skills, as well as reading and listening strategies to decode the message conveyed in texts.</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Identify different strategies that can be used for getting necessary information from listening and reading texts (Awareness) 2. Use the prediction strategy for predicting the content of the listening and reading text from the title or from a brief description (Skill)

	<ol style="list-style-type: none"> 3. Apply the guessing strategy to guess the meaning of unknown words from context (Skill) 4. Apply the skimming strategy to get a general idea of the reading or listening passage (Skill) 5. Use the scanning strategy to find specific information from the reading or listening text (Skill) 6. Effectively use various technological tools for completing assignments (Skill) 7. Create video materials on highlighted topics (Skill)
<p>GOAL 3: Develop critical thinking skills by teaching summarizing and synthesizing information in writing, as well as analyzing and critically reflecting on content.</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Recognize techniques needed for effectively summarizing and synthesizing information in written form (Awareness) 2. Identify the structure and purpose of reflective writing (Knowledge) 3. Summarize information obtained from video materials and reading texts in written form (Skill) 4. Effectively synthesize information obtained from different sources in written form (Skill) 5. Critically analyze information obtained from various sources (Skill) 6. Use reflective writing techniques to reflect personally on the content (Skill)
<p>GOAL 4: Develop skills to effectively communicate one's opinion, report on various topics, build effective arguments to support one's point, and persuade an audience</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Identify various linguistic and discourse strategies for speaking (Awareness) 2. Recognize various non-linguistic means used in discussions and debates (Awareness) 3. Use related vocabulary for persuading the audience, arguing for or against a point in oral form (Skill) 4. Use effective presentation and reporting skills in speaking (Skill) 5. Apply related linguistic and non-linguistic means and strategies to convey meaning effectively (Skill)

3.4 Assessment Plan

The assessment plan for this course has a dual function. The first function is measuring the achievement of the goals and objectives that have been set for the course. The other function is providing yet another learning experience for the students.

For the purposes of this course, a largely project-based approach to assessment has been chosen. This decision has also been informed by my personal observations, as well as the popularity and reported advantages of project-based learning. Presentation, simulation game and video production projects have been chosen as these not only measure the course goals and objectives but they also provide an ample space for learning from the materials, from the teacher, and from each other. Besides, tasks and projects are more engaging and motivating than tests.

Another major course assignment that has been included in the assessment plan is the blog subscription and reflection assignment. Blog subscriptions create an opportunity for autonomous learning to take place. Writing reflections allows students to analyze content and reflect on their own learning.

The grid below represents the assessments designed for measuring the course goals and objectives.

Assignment	Description	Objectives Addressed
Presentation 20% of grade	Students will work individually and prepare one presentation on a related topic. Proper guidance and a grading rubric will be provided by the teacher.	<ul style="list-style-type: none">• Recognize current environment-related issues• Identify examples of citizenship and ownership• Evaluate ethical values related to the world surrounding us• Critically analyze information obtained from various sources

		<ul style="list-style-type: none"> • Identify various linguistic and discourse strategies for speaking • Use effective presentation and reporting skills in speaking • Apply related linguistic and non-linguistic means and strategies to convey meaning effectively.
<p>Video production</p> <p>20% of grade</p>	<p>Students will create a short video on a related topic in small groups (2-5 minute long). Workshops will be organized by students to introduce the 3 stages of video-production. Students will be provided with necessary materials and a grading rubric.</p>	<ul style="list-style-type: none"> • Evaluate ethical values related to the world surrounding us • Critically analyze information obtained from various sources • Create video materials on highlighted topics • Identify the value of team work and cooperative learning through group projects
<p>Simulation Game</p> <p>20% of grade</p>	<p>Teacher will assign different roles to students. Each group will independently search for information and materials related to their roles in preparation for a simulation game (a role-play debate) related to an environmental issue. Classroom discussion on the topic will also take place before the debate. Students will be provided with debate guidelines and a grading rubric.</p>	<ul style="list-style-type: none"> • Identify the value of team work and cooperative learning through group projects • Recognize current environment-related issues • Critically analyze information obtained from various sources • Use related vocabulary for persuading the audience, arguing for or against a point in oral form • Use effective presentation and reporting skills in speaking • Apply related linguistic and non-linguistic means and strategies to convey meaning effectively.
<p>Reflections</p> <p>40% of grade</p>	<p>Students will create a page where they will subscribe to blogs, websites and will follow them. They will write reflections in their blogs based on the readings and videos they watch, classroom discussion and any additional sources from their blog subscriptions. After, each reflection, T will send individual feedback to each student both on content and language</p>	<ul style="list-style-type: none"> • Recognize current environment-related issues • Evaluate ethical values related to the world surrounding us • Critically analyze information obtained from various sources • Summarize information obtained from video materials and reading texts in written form • Effectively synthesize information obtained from different sources in written form • Use reflective writing techniques to reflect personally on the content

3.5 Learning Plan

The language-driven content-based course is organized around watching documentary films on environmental topics.

The course incorporates many or some elements of modern methods and approaches to successful learning like the content-based approach, skills-based approach, task-based learning, collaborative learning and communicative language teaching.

The content-based approach allows for purposeful learning through meaningful content, in this case environmental issues facing the Earth, with particular focus on Armenian context.

As the course has adopted the student-centered approach to learning, it is expected to develop active learners who will be given ample opportunities to practice the material meaningfully, to reflect critically on the course material and on their own learning, to develop problem-solving skills. Some classroom activities like group discussions, jigsaw activities, debates have been designed to be carried out in groups to promote collaborative learning.

The course also follows a project-based assessment plan. Students are expected to complete tasks and projects throughout the course, which have not only been designed to assess their performance but, most importantly, help them develop content and linguistic knowledge and skills in a meaningful way. These include presentations, the video-production project, the simulation game.

The course integrates a variety of technologies like blogging, video production, some tools offered by Google for making learning more effective and motivating for students, and developing autonomous learners.

It is an integrated-skills course though the main focus is on speaking and writing skills on the higher levels of analysis - synthesis of information and critical reflection. The focus is on higher order thinking skills because cognitive development of students is one of the main aims of this course. The skills training is intended to be carried out through content instruction, particularly through analysis and discussion of current environmental issues.

The grid below shows the topics and main activities that are used during the 10-week course.

Weeks	Topics	Classroom Activities
1.	General Overview of the Course Syllabus Discussion	<ul style="list-style-type: none"> • Icebreaker game • Introduction to basic environmental terms • Pre-questionnaire to measure current content knowledge of the students • Workshop on blogging and RSS subscriptions
2.	Forest Ecosystems	<ul style="list-style-type: none"> • Brainstorming • Reading activity: forest ecosystems, food chains and food webs • Writing activity: writing the summary of the reading text • Vocabulary activity: preparing for watching the documentary • Watching the first part of a documentary film on forest ecosystems • Discussion
3.	Forest Ecosystems (continued)	<ul style="list-style-type: none"> • Workshop on summarizing and synthesizing techniques • Reading activity: reflective writing • Discussion: reflective writing • Vocabulary activity: preparing for watching the documentary • Watching the second part of the documentary on forest ecosystems • Discussion
4.	Water Resources Management	<ul style="list-style-type: none"> • Brainstorming • Vocabulary: matching activity • Watching a documentary on Aral Sea disaster • Group discussion • Jigsaw activity: a reading on Lake Sevan • Watching a video on fresh water use and water shortage • Discussion: Solutions for water conservation
5.	Mining	<ul style="list-style-type: none"> • Discussion: positive and negative aspects of mining • Brainstorming

		<ul style="list-style-type: none"> • Watching a documentary film on phosphate mining on Nauru Island • Discussion of the video • Reading activity: additional environmental problems Nauru faces • Discussion: solutions • Analysis of environmental posters • Writing activity: creation of environmental posters • Video-production workshop: Scripting stage
6.	Mining in Armenia	<ul style="list-style-type: none"> • Brainstorming: environmental problems in Armenia • Jigsaw activity: uses of copper and molybdenum • Watching a documentary on mining in the Syunik region of Armenia • Writing activity: reflection on the film • Discussion • Preparation for the simulation game (debate) for next class • Video-production workshop: Shooting stage
7.	Simulation Game on Mining Recycling	<ul style="list-style-type: none"> • Simulation game: debate on mining in Armenia • Feedback session • Brainstorming: recycling and its types • Vocabulary activity: preparing for watching a documentary • Watching a documentary film on recycling • Reading activity: a recycling project in Armenia • Discussion
8.	Global Warming Alternative Energy Sources Ecological Sustainability	<ul style="list-style-type: none"> • Brainstorming: global warming and its rates • Reading activity: causes of global warming • Watching a TED talk on global warming and solutions • Discussion on global citizenship • Brainstorming: ecological sustainability • Watching a video on sustainable development • Discussion: alternative energy sources
9.	Student Presentations	<ul style="list-style-type: none"> • Student presentations • Teacher and peer feedback • Video production workshop: Editing
10.	Student-made videos Course Evaluation	<ul style="list-style-type: none"> • Presenting video-production projects • Discussion: challenges during video production • Role play: Individual and collective solutions to environmental problems in Armenia • Post-questionnaire to measure students' content achievement • Focus-group interviews to measure the overall effectiveness of the course

3.6 Timeline of the Project

The timeline for major steps in my project is the following:

- Needs analysis – October 2013
- Literature review – November 2013
- Finalizing course goals, objectives and assessment – November 2013
- Proposal presentation – December 4, 2013
- Writing up the learning plan – December 2013 – January 2014
- Piloting the course – February – April 2014
- Course evaluation – April 2014
- Capstone Defense – April 29, 2014
- Turning in the final draft – May 7, 2014

3.7 Deliverables

I have produced the following resources during the design and piloting of the project:

1. A detailed syllabus including the course description, course goals and objectives, the assessment plan, the schedule and topics and scoring rubrics (Appendix A)
2. Ten lesson plans with all the teaching materials (Appendix B)

3. Links to the documentary films and the TED Talk used in class and their description (Appendix C)
4. Pre- and post-questionnaire forms to assess content knowledge of the students and their attitude (Appendix D)
5. Interview questions to assess the overall effectiveness of the course (Appendix E)
6. Teacher reflections for each class (Appendix F)
7. Recommendations for teachers (Chapter 4.2)

3.8 The Piloting Procedure

The project was piloted with an intermediate-level group taking the Experimental English Classes (EEC) at the American University of Armenia. The number of students was 11. The group was selected based on the group member's preference to take the course. I piloted nine out of the ten lessons.

I wrote reflections after each class to record my personal observations about classroom procedures, topics, materials, student engagement. Focus-group interviews were taken from students at the end of the course to evaluate the overall effectiveness of the course and provide recommendations for making future adjustments in the course based on students' answers and my personal observations.

CHAPTER FOUR: REFLECTION AND RECOMMENDATIONS

4.1 Reflection on the Project

My design project can be generally described as a labor-intensive but an exciting one. I enjoyed the whole process of the design and implementation of the project, and it was really a major learning experience for me.

As I am a strong advocate of a multidisciplinary approach to second or foreign language learning, designing a CBI course was exactly what I wanted.

The theme for my course underwent revisions and reconsideration. First, I was thinking of designing a movie-based CBI course on different topics aimed at raising students' awareness on various issues. On the other hand, most of the textbooks are theme-based and this approach seems to have proved to be successful. Taking this into account, I began to think about a topic that would be interesting and meaningful for the students at EEC and would develop responsible citizens of this country.

I carried out a needs analysis to find out which topics the intermediate and upper-intermediate level students at EEC are interested in. The needs analysis was also aimed at finding out students' attitude towards types of films they preferred to watch, and towards specific activities like blog reflections or class discussions. One of the recurring topics of interest was nature and environment. This was a perfect topic for me as it is meaningful and informative, and I have always been an environmental activist. I knew that teaching the content part would be a challenge and would require some additional work. I was ready to face the challenge as this seemed to be a doable task for me. However, the results of this needs analysis gave only a general idea about what my course should include because I made most of the major decisions

about my course design after the needs analysis. I decided to use documentary films as the main text because they are informative and convenient for the theme I have chosen.

Once I decided on the topic for my design project, I started searching for relevant literature. Doing the literature review was important because I had limited knowledge about the types of CBI and CBI pedagogies, as well as about the best ways of integrating video in the classroom. The literature review resulted to be a very labor-intensive process but it was very helpful. From my advisor's and reader's comments, I learned that no claim should be made without proper justification and without referring to research evidence. I also learned that the literature review should directly inform the decisions I make for my project. Otherwise, it would be useless. I am happy to state that the literature review influenced important decisions I made during the project design.

Maybe, it would have also been worth to look at some practices of implementing environmental courses during the process of the literature review. On the other hand, it might have limited my creativity in designing my own course.

I also learned that having clear goals and objectives for the course is very important. You cannot start thinking of the activities unless you have solid goals, and objectives that conform to those goals. The literature review also guided me in being careful to include goals that would address both language and content. Regarding language goals, they mainly address skills rather than knowledge. I thought it would be acceptable for intermediate-level students, and I was more or less right. Another important thing I learned is that it is equally important to design assessment that will directly measure both the content and language goals you have set. In fact, many activities can measure language and content goals at the same time. After thorough consideration, I managed to align course goals and assessment in a meaningful way.

To my surprise, writing the learning plan was one of the most challenging parts for me. In fact, it is not easy to write a learning plan for a whole course and divide it into weekly topics and activities before actually piloting the course. That is why my learning plan has undergone considerable changes throughout the design and piloting of my project. Regarding lesson plans, I have never imagined that it is possible to write a lesson plan unless you have piloted the previous lesson. As a matter of fact, I didn't write a new lesson plan until I piloted the previous one. The reason is that each lesson plan was informed by the previous lesson I conducted. In this regard, I am happy that I was able to pilot my course. My lesson plans have also been written with great care and consideration for details. Now I can surely say that my lesson plans are doable and each lesson is the logical continuation of the other.

Actually, the most valuable experience for me was the piloting stage. It was during this stage that I understood what works well in my course, and what needs to be revised. Piloting also helped me figure out if the timing of the activities was appropriate, if students displayed interest towards the material.

I did the course evaluation in the following ways:

1. Teacher reflections after each class to record my personal observations on the effectiveness of classroom activities, student engagement.
2. Student reflections after each class to track students' perceptions of the course content and the activities.
3. Pre- and post-questionnaires to compare students' content knowledge and attitude towards environmental issues at the beginning and at the end of the course.

4. Focus group interviews with students at the end of the course to evaluate the overall effectiveness of the course and reveal students' perceptions of possible changes that could be made in the course design.

1. My own reflections on each class helped me track the whole teaching process and draw corresponding conclusions. Firstly, I noticed that students seemed to be quite interested in the content of the course and they were quite active during the discussions. I was also able to observe how the students learned to summarize, synthesize information, reflect critically on content. However, only five out of 11 students wrote reflections regularly. I think one of the main reasons was that one of my peers was doing a research with this group. The research procedure required students to write opinion essays twice a week. So, my reflections were probably too much for the students. In fact, I carried out a mini-research during one of my classes. The students who didn't write reflections were asked to write their reasons for that. Their ideas showed that my supposition was correct. Besides, a couple of them wrote that they simply do not like writing reflections. I also observed that students didn't make use of the blogs and websites they had been asked to subscribe to. Besides, students liked whole class discussions of videos more than small group discussions because, as they claimed, they were eager to share their ideas with the whole class. In contrast, I could notice that jigsaw activities worked really well and students were very motivated when they knew they were the experts who have to pass on information to the other group. Another observation that I made was that students seemed to be much more excited when we discussed local environmental issues. I can also claim that the students really analyzed and reflected critically on any piece of information they were provided. The atmosphere in the classroom was such that we all learned from each other.

2. Though only half of the students wrote reflections regularly, I could observe from their writings that the content was quite interesting for them. They reported to have learnt a great deal of valuable information from the videos and from the readings. However, the reflections mainly addressed the content part.

3. The pre-questionnaire and the post-questionnaire were aimed at comparing students' content knowledge and their attitude towards environmental issues and activism at the beginning and at the end of the course. The results of the comparison between the pre-questionnaire and the post-questionnaire were controversial. A few students clearly recorded improvement of knowledge and more positive attitude towards some activities to save the environment. This improvement was not only self-reported. Students also elaborated on the answers in the given slots. But the results were not the same for all the students. Though several students ticked that their knowledge on particular topics has increased, they didn't share their ideas in detail. In a few cases, the answers in the pre-questionnaire were more detailed than those in the post-questionnaire. This indicates that the questionnaire might not be very well-constructed and seems to have failed to withdraw elaborate answers from students. Students did not seem to take it seriously and completed it only for the sake of completing it. My own observations clearly show that they know much more than they wrote in the questionnaire.

4. At the end of the course, focus-group interviews were carried out with the students to evaluate the overall effectiveness of the course.

As the students reported, their overall opinion about the course was very positive in that they learnt very interesting and important things. One of the students also claimed that at school they only learn about "trees and animals" but never about the actual environmental problems and the solutions to them. Most of the students stated that they have changed their opinions about their

roles as responsible citizens of their country and of the world. They claimed that after taking the course they feel different about environmental problems. This is because they didn't know so much about man-caused problems and their consequences before.

Students mentioned that even if they were given the choice to decide, they would still attend the classes. The only problem for some of them was coming to class on Saturday. Students also claimed that apart from content they also learned language. Particularly, they learned new words and developed their speaking and writing skills.

Regarding the activities, students said that they liked almost all the activities we did in class, especially the videos, the jigsaw activities, the debate, the presentations. Students said that jigsaws were exciting for them because they had to understand whatever they read to be able to explain it to their peers from the other group. As the students reported, their favorite activity was the simulation game (role-play debate) on mining in Armenia. They claimed that it was very interesting to take on a role and argue from that perspective. That day my peers also participated in the lesson and in the debate. The students mentioned that they were really excited to have guests in their groups and conduct a debate with them. Regarding videos, students mentioned that they would rather have general discussions of the videos, rather than answering comprehension questions. One of the students mentioned that he would like even more deliberate attention to vocabulary from the part of the teacher. As for writing reflections, opinions differed. Some of the students said this was a valuable experience for them and a way to digest the information they got in the classroom. Another group of students said that they simply don't like writing reflections.

Finally, though students claimed that they have become more aware and more responsible, most of them admitted that they are not ready to take more active roles in protecting the environment. However, they also mentioned that they will never litter or "do anything bad".

4.2 Recommendations

Based on the design, piloting and assessment of this CBI course, I have come up with the following recommendations for those who would like to implement my course:

- Teach this course only if you are interested in environmental issues.
- If you are a language teacher willing to implement this course, you should work hard on your content knowledge. Being knowledgeable in both content and language is equally important. If there is no workshop or training to attend, turn to autonomous self-learning or cooperate with a content specialist. The course materials are not enough for your content knowledge to be sufficient for teaching the course. Delve deeper into each topic discussed during the course.
- Try to pay explicit attention to vocabulary. Work on students' vocabulary before watching each video.
- Always encourage students to reflect analytically on any piece of information you provide. Explain them that their opinions are respected and welcome. At the same time, remind them that it is important to base their opinions on facts or evidence. If there are points upon which there is disagreement, encourage students to go home and check in the internet. This way you will develop autonomous learners.
- Make the blog subscriptions assignment meaningful. Though my students subscribed to environmental blogs and websites, they didn't really make any use of them. One way of

making this assignment more meaningful could be urging students to write reflections not only on classroom videos and readings but also on relevant information from the blogs and websites they are subscribed to.

- Though the interviews revealed that some of the students do not like writing reflections, I still consider that this assignment should be kept because it is very useful both for the students and for the teacher. Maybe one way of encouraging students to write them is explaining them the educational value of writing reflections. It is also important to make sure that other subject teachers do not overwhelm students with reflective writing assignments. Do not forget to send feedback on each reflection. You could comment on the content in the blog and send an individual e-mail with vocabulary and grammar feedback.
- Always make the objectives for each assignment clear to the students. Provide students with the syllabus for the course.
- During discussions, leave some time for discussing solutions on particular environmental problems. Only raising students' awareness about a particular issue will not be very effective if they don't know how to deal with it.
- My personal observations recorded in my reflections have also revealed that students get more excited when each topic is connected to local context. Try to lead each discussion to one about local environmental issues. You could also consider discussing deforestation and loss of biodiversity in Armenia in more detail. I wasn't able to include the topic because of lack of time.
- Try to find a reasonable balance between small group and whole class discussions. From time to time you might consider students' opinions too.

- Don't create the image of an expert. Be a facilitator. Explain students that you should all learn from each other.
- As discussed in the reflection section, the pre- and post-questionnaires managed to capture the change in students' attitude during the course. However, they failed to measure the change in students' content knowledge. Students seemed to ignore the open-ended items. One suggestion is editing the questionnaire and preparing questions that would require students to elaborate more on their answers. Another solution is designing an open-ended test to measure progress in students' content knowledge. Students tend to take tests more seriously than questionnaires.
- Whenever there is possibility, invite knowledgeable guest speakers to class – ecologists or environmental activists. Students would love it. I also strongly recommend that you consider organizing trips to, say, a recycling company, or cleaning and tree planting events to raise students' social responsibility as citizens of their country and as global citizens.
- Always be flexible. If you feel something doesn't work, do not hesitate to make justified changes in it.
- Do at least a small course evaluation to assess the effectiveness of your course and to be able to make necessary changes. Writing teacher reflections might also help

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APPENDICES

APPENDIX A: SYLLABUS

Content-Based English Course
“Exploring Environmental Issues through Video”
SYLLABUS FOR SPRING 2014

Meeting Times:	Saturday, 14:30 – 16:30
Location:	212 Main Building, AUA
Instructor:	Kristine Goroyan
Contact Information:	Email: kristine_goroyan@edu.aua.am Phone: 077 10 91 93
Blog Address:	kristinegoroyan.blogspot.com

Course Description

This course is organized around watching documentary films on environment-related topics. The course will help students to develop a better understanding of how the nature works, explore and analyze examples of environment-related issues, get acquainted with related vocabulary. The course will equip students with necessary linguistic and non-linguistic skills of using appropriate vocabulary to convey meaning effectively in discussions and debates, summarizing and synthesizing, as well as reflective writing techniques, using different reading and listening strategies for effective comprehension. The course will also help students to get acquainted with different technological tools that they will be able to use throughout their lifetime.

COURSE STRUCTURE

- We will meet once a week for 120-minute class sessions.
- Class time will consist of video watching sessions, readings, discussions, activities, student presentations.
- You are expected to be actively involved in every lesson – arriving on time, contributing in discussions, collaborating with your peers, thinking critically about various issues in this course.
- All the homework assignments and necessary materials will be sent to you by mail.

LEARNING OUTCOMES

The following chart shows the goals and the respective objectives of the course:

COURSE GOALS	COURSE OBJECTIVES
<p>GOAL 1: Raise awareness of environment-related issues to introduce related values and develop a sense of ownership and global citizenship</p>	<p>By the end of this course students will be able to: OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Recognize current environment-related issues 2. Identify examples of global citizenship in terms of advocacy on ecological sustainability 3. Evaluate ethical values related to the world surrounding us 4. Identify the value of team work and cooperative learning through group projects
<p>GOAL 2: Develop self-confident and autonomous learners by enhancing digital literacy and technological skills, as well as strategies for listening and speaking</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Identify different strategies that can be used for getting necessary information from listening and reading texts 2. Use the prediction strategy for predicting the content of the listening and reading text from the title or from a brief description 3. Apply the guessing strategy to guess the meaning of unknown words from context 4. Apply the skimming strategy to get a general idea of the reading or listening passage 5. Use the scanning strategy to find specific information from the reading or listening text 6. Effectively use various technological tools for completing assignments 7. Create video materials on highlighted topics
<p>GOAL 3: Develop critical thinking skills by teaching summarizing and synthesizing information in writing, as well as analyzing and evaluating content.</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Recognize techniques needed for effectively summarizing and synthesizing information in written form 2. Identify the structure and purpose of reflective writing 3. Summarize information obtained from video materials and reading texts in written form 4. Effectively synthesize information obtained from different sources in written form 5. Critically analyze information obtained from various sources 6. Use reflective writing techniques to reflect personally on the content
<p>GOAL 4: Develop skills to effectively communicate one's opinion, report on various topics, build effective arguments to support one's point, and persuade an audience.</p>	<p>OBJECTIVES:</p> <ol style="list-style-type: none"> 1. Identify various linguistic and discourse strategies for speaking 2. Recognize various non-linguistic means used in discussions and debates 3. Use related vocabulary for persuading the audience, arguing for or against a point in oral form 4. Use effective presentation and reporting skills in speaking 5. Apply related linguistic and non-linguistic means and strategies to convey meaning effectively

SCHEDULE AND TOPICS

WEEKS	TOPICS	CLASSROOM ACTIVITIES
1.	General Overview of the Course Syllabus Discussion	<ul style="list-style-type: none"> • Introduction to basic environmental terms • Pre-questionnaire to measure current content knowledge of the students • Workshop on blogging and RSS subscriptions
2.	Forest Ecosystems	<ul style="list-style-type: none"> • Reading activity: forest ecosystems, food chains and food webs • Writing activity: summary writing • Watching the first part of a documentary film on forest ecosystems
3.	Forest Ecosystems (continued)	<ul style="list-style-type: none"> • Workshop on summarizing and synthesizing techniques • Reading activity: reflective writing • Watching the second part of the documentary on forest ecosystems
4.	Water Resources Management	<ul style="list-style-type: none"> • Watching a documentary on Aral Sea disaster • Jigsaw activity: a reading on Lake Sevan • Watching a video on fresh water use and water shortage
5.	Mining	<ul style="list-style-type: none"> • Watching a documentary film on phosphate mining on Nauru Island • Reading activity: additional environmental problems Nauru faces • Analysis and creation of environmental posters • Watching a documentary on oil extraction • Video-production workshop: Scripting
6.	Mining in Armenia	<ul style="list-style-type: none"> • Watching a documentary on mining in the Syunik region of Armenia • Preparation for the simulation game (debate) for next class • Video production workshop: Shooting
7.	Simulation Game on Mining Recycling	<ul style="list-style-type: none"> • Simulation game: debate on mining in Armenia • Watching a documentary film on recycling • Reading activity: a recycling project in Armenia
8.	Global Warming Alternative Energy Sources	<ul style="list-style-type: none"> • Reading activity: causes of global warming • Watching a TED talk on global warming and solutions • Watching a video on sustainable development • Discussion on alternative energy sources
9.	Student Presentations	<ul style="list-style-type: none"> • Student presentations • Video production workshop: Editing
10.	Video-production Projects Course Evaluation	<ul style="list-style-type: none"> • Presenting video-production projects • Post-questionnaire • Focus-group interviews

ASSIGNMENTS

The following chart shows the assignments that students will be required to complete throughout the course:

ASSIGNMENT	DESCRIPTION	GRADE
Presentation	Individually you will prepare one presentation on an environment-related topic. Guidance will be provided by the teacher through class discussion and individual conference meetings. The presentation should not exceed 15 minutes (see the grading rubric for presentations).	20%
Video production	In small groups (3-4 people), you will create a short video on an environment-related topic. Teacher will organize classroom workshops and conference meetings as needed before presenting the final product. The videos should not exceed five minutes (see the grading rubric for video-production projects).	20%
Simulation Game	You will be assigned different roles by the teacher. In your groups, you will search for information and materials related to your roles in preparation for a simulation game related to an environmental issue (see the grading rubric for the simulation game).	20%
Reflections	For this assignment, you'll create a page where you'll subscribe to blogs, websites, and other resources and follow them. You will write reflections based on the videos you watch, on the classroom readings and readings and videos from your subscriptions (see the grading rubric for blog subscriptions and reflections).	40%

EXPECTATIONS AND POLICIES

Late Work: In general, late work will not be accepted. If you have any unexpected problems, contact me in advance. We will then discuss what can be done.

Attendance: Please try to attend all classes. If you miss a class, find out about missed classes and discussions from fellow students. Please try to arrive on time not to disturb the class process.

Food & Drink: Please, do not bring any food to the classroom. Drinks are allowed.

Devices: Try not to get distracted by Facebook or the Internet. If you must take a phone call, please wait for the break or leave the classroom.

GRADING RUBRIC FOR PRESENTATIONS

REQUIREMENTS	POINTS
Introduced topic effectively	2
Tried to make the presentation interactive	2
Maintained eye contact with listeners in all parts of the room	1
Spoke loudly and clearly	2
Slides did not contain too much text. Material was presented, not read	2
All the main points were highlighted. Topic was developed with sufficient reasons, examples and details	3
Used reasonably accurate grammar and vocabulary	2
Organized ideas logically, made clear transitions	2
Responded appropriately to questions	2
Concluded presentation effectively	2
TOTAL: 20 POINTS	

GRADING RUBRIC FOR VIDEO PRODUCTION PROJECT

Performance Level	Needs Improvement	Satisfactory	Excellent
Group Collaboration	The work was not shared fairly. One or two students did all the assignment 0-1 points	All members contributed equally to the work, though there was some variation 2 points	All members had equal contribution to the project. 3 points
Storyboarding	Students did not make a storyboard or storyboard was not appropriate for the video. 0-1 points	Students made the storyboard on. However, some steps are not clearly explained. Storyboard fits the project 2-3 points	Students made the storyboard. Storyboard is detailed and fits the project 4 points
Content and organization	The video doesn't have a main topic, and logical sequence of content and ideas. Much of the information is not relevant to the topic 0-2 points	Information is related to a topic. Details are provided and information is mostly relevant in the video. 3-4 points	Video has a specific purpose. The topic is presented adequately with necessary supporting details 5 points
Spelling and punctuation	There are 5 or more grammar or spelling errors. 0-1	There are 2-3 grammar or spelling errors. 2 points	There are less than 2 grammar or spelling errors 3 points
Quality of the Video	The quality is poor. There is lack of transitions or overuse of them. There are no graphics. 0-2	There are sufficient transitions. The timing and pace is adequate. 3-4 points	Transitions are very effective. They help to convey the main idea. All the scenes in the video are relevant. 5 points
Total		20	

GRADING RUBRIC FOR THE SIMULATION GAME

Speakers clearly understood the topic in depth and presented their information convincingly	2
The speakers' statements clearly supported their position in the debate	2
The main ideas and arguments were well-supported with facts and examples	2
Each team member knew his/her subject well	1
Speakers were prepared and used notes minimally	2
Objections were specific to opposing arguments, expressed with clarity and showed evidence of good listening skills	2
Speakers consistently used gestures, eye contact	1
Speakers stayed within time limits	1
Speakers showed respect to each other	1
Each team member participated actively in the debate	1
TOTAL: 15 POINTS	

GRADING RUBRIC FOR BLOG SUBSCRIPTIONS AND REFLECTIONS

	Not yet competent	Developing	Advanced
<ul style="list-style-type: none"> • A page with at least five subscriptions 	1-3	4-7	8-9
<ul style="list-style-type: none"> ○ At least 7 individual posts of reflective nature 	1-3	4-6	7-8
<ul style="list-style-type: none"> ○ Evidence of regular posting throughout the quarter (once a week) 	1-2	3-4	5-6
<ul style="list-style-type: none"> ○ Content reflecting videos watched in class, classroom readings and materials assigned for homework, class discussions, AND from personal RSS subscriptions 	1-3	4-7	8-9
<ul style="list-style-type: none"> ○ Reflective nature of content: connections between posts, videos, other blogs, other content; links to other sites; questions 	1-2	3-5	6-7
<ul style="list-style-type: none"> • Free of linguistic or mechanical errors 	1-2	3-4	5-6
TOTAL: 45 POINTS			

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 1

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides.

By the end of the lesson students should be able to:

- Discuss what the course is going to be about
- Identify some tips related to blogging
- Identify and use basic environmental terms

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Introduction	5 min	<ul style="list-style-type: none"> • T greets Ss and introduces herself • T explains to Ss why she has designed the course they are going to take and talks about her expectations regarding course outcomes 	T – S <ul style="list-style-type: none"> • To introduce herself and the course to Ss
2. Introducing each other	15 min.	<ul style="list-style-type: none"> • T divides the class into pairs • T asks the pairs to talk for 5 minutes and exchange information about each other • Then the participants introduce the other person to the rest of the class 	T-S S-S <ul style="list-style-type: none"> • To get to know Ss better • To help Ss get more information about each other

3. Icebreaker Game	10 min.	<ul style="list-style-type: none"> • T tells Ss they are going to play the ‘Candy Introductions’ icebreaker game. • T passes around the M&Ms candies and asks Ss to pick one and not to eat it yet • T tells Ss what each color candy represents: Red – Dream job Green – Favorite place on earth Blue – Favorite hobbies Yellow –Favorite place on Earth • Each person takes turns giving information about themselves based on the color of the candy they’ve got 	T- S S – S	<ul style="list-style-type: none"> • To create a friendly and a relaxed atmosphere in the classroom • To give Ss opportunity to get to know each other further • To detect some individual characteristics of each student for taking into account in future
4. Gathering Contact Information from Students	10 min	<ul style="list-style-type: none"> • T gives Ss a form and asks them to fill it out by providing their names and contact information, as well as blog addresses if they have any (Appendix 1) 	T – S	<ul style="list-style-type: none"> • To get the contacts of Ss for regularly sending them their homework by mail, as well as for other unforeseen purposes
5. Blogging Workshop	10 min	<ul style="list-style-type: none"> • T tells Ss they are going to use blogs for writing their reflections for homework. Alternatively, Ss will type them on a word document and send them to the T by e-mail. • T and Ss discuss some issues related to opening their own blogs, as well as some details related to changing the layout, the privacy of the blog, subscribing to each other’s blogs, adding blogs and websites to their reading list • T shows some of the above-mentioned steps on her computer projected on the board. As Ss result to be quite familiar with blogging, teacher doesn’t spend much time on workshop. 	T – S S – S	<ul style="list-style-type: none"> • To introduce blogging to Ss who are not familiar with it • To introduce some features that Blogger.com has • To clarify any issues before setting to using the blogs for the purposes of the course

6. Discussing Basic Environmental Terms	15 min	<ul style="list-style-type: none"> • T shows a PPT slide with some basic environmental terms related to the topics the course is going to cover • T asks Ss to work in pairs or in groups of three and try to come up with the explanation of their meaning • Then T provides the definition of each term (on PPT slides) during the in-class discussion 	T – S S – S	<ul style="list-style-type: none"> • To activate Ss' background schemata • To prepare Ss for filling in the pre-questionnaire for the course • To prepare Ss for presenting the course syllabus
7.Pre-questionnaire	25 min	<ul style="list-style-type: none"> • T tells Ss they are going to complete a pre-questionnaire for the course • T asks Ss to make the best effort in answering the questions as she is going to compare them with the post-questionnaire answers at the end of the course. 	T – S	<ul style="list-style-type: none"> • To check the level of Ss' knowledge on the topic • To find out any patterns based on which the syllabus might be readjusted • To have a way of measuring student achievement (on content knowledge) at the end of the course.
8.Introducing the Syllabus	25 min	<ul style="list-style-type: none"> • T introduces the course syllabus with course description, course structure, course objectives, assessment plan, topics to be covered and grading rubrics. 	T – S S – S	<ul style="list-style-type: none"> • To make the aims and timeline of the course clear to students • To introduce criteria by which students' achievement will be assessed
9. Homework	5 min.	<ul style="list-style-type: none"> • As a homework assignment, T asks Ss to add at least five content-related blogs or websites to their reading list (in their blogs) • T tells Ss she will post the detailed homework (with blog and website suggestions) via e-mail. 	T – S	

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 2

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts, worksheets

By the end of the lesson students should be able to:

- Analyze and discuss information on forest ecosystems and how they work
- Practice reading for general information
- Practice listening and using visual clues for getting specific information
- Practice writing a summary of the text
- Use guessing strategy to identify target vocabulary in context.

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up	5 min	<ul style="list-style-type: none"> • T greets Ss • T asks Ss whether all of them have already opened blog accounts • Ss write their blog addresses in the student information form 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson • To make sure Ss have blog addresses
2. Blogging workshop	7 min.	<ul style="list-style-type: none"> • T asks Ss if they have been able to add environmental blogs and websites to their reading list • T shows the class how to add websites to their reading list on the computer projected on the board • T tells Ss she will recommend some websites in the coming homework assignment. 	T-S <ul style="list-style-type: none"> • To make sure Ss have understood how to add websites to the reading list
3. Pre-reading activity: Brainstorming	5 min.	<ul style="list-style-type: none"> • T asks Ss to brainstorm about what a forest ecosystem is, what it consists of, what symbiotic relationship is. • T puts Ss' ideas on the board 	T- S S – S <ul style="list-style-type: none"> • To activate Ss' background schemata • To prepare Ss for the reading text

4. Reading activity	7 min	<ul style="list-style-type: none"> • T asks Ss to get in pairs and read the information on forest ecosystems for getting general idea of the content in the text 	<p>T – S S – S</p>	<ul style="list-style-type: none"> • To understand what a forest ecosystem is and how it works • To prepare Ss for watching the subsequent video
5. Post-reading activity: Stage 1	11 min	<ul style="list-style-type: none"> • T asks Ss to get in groups of 2-3 and discuss the text focusing on the following (provided on the screen): ✓ What a forest ecosystem consists of ✓ Difference between biotic and abiotic organisms ✓ Difference between carnivores, herbivores and omnivores ✓ Producer – consumer – decomposer relationship ✓ Predator – prey relationship • Then T asks Ss to bring their ideas to the whole class discussion. 	<p>T – S S – S</p>	<ul style="list-style-type: none"> • To check Ss' comprehension of the text • To draw Ss' attention on specific information in the text • To develop group-working skills • To prepare Ss for watching the video
6. Post-reading activity: Stage 2 Summary writing	15 min	<ul style="list-style-type: none"> • T asks Ss to brainstorm what a summary is and what information it should contain • T asks Ss to get in pairs and write a short summary (4-5 sentences) of the reading • T asks two volunteer groups to read their summaries • T asks Ss what they think is wrong with these summaries. T explains that a summary should not only include main information of the text but it should also present the information in paraphrased sentences • T picks several copy-pasted sentences and asks Ss how they would paraphrase them 	<p>T – S S – S</p>	<ul style="list-style-type: none"> • To illustrate how to write a good summary in an inductive way • To show Ss that copy-pasting is wrong in an academic environment • To prepare Ss for writing reflections for homework

7.Pre-watching activity: Stage 1 Vocabulary	10 min	<ul style="list-style-type: none"> • T shows words on PPT slides and situations in which they are used (see Appendix 1) • T asks Ss to guess the meaning of the words • T also shows pictures with the animals that will appear in the video 	T – S S – S	<ul style="list-style-type: none"> • To introduce potentially challenging vocabulary items to Ss before watching the video • To enrich Ss’ vocabulary mainly related to nature and ecology
8.Pre-watching activity: Stage 2	5 min	<ul style="list-style-type: none"> • T shows the title of the documentary film (‘Magical Forest’) on a PPT slide and asks Ss to predict what it is going to be about • T distributes comprehension questions on the video to Ss beforehand and tells them these are questions related to the first part of the video they are going to watch (See Appendix 2) • T asks Ss to take a look at the questions and have them in mind when watching the video 	T – S	<ul style="list-style-type: none"> • To prepare Ss for watching the documentary film • To guide Ss during film watching • To ease the comprehension of the film
9. Watching the first part of the video	10 min.	<ul style="list-style-type: none"> • Ss watch the first 10 minutes of the 58-minute long documentary film ‘Magical Forest’ http://www.youtube.com/watch?v=khaYeIpmePo 	T – S	<ul style="list-style-type: none"> • To get acquainted with forest ecosystems and the way they function • To expose Ss to authentic speech
10. Post-watching activity for the first part of the video	8 min	<ul style="list-style-type: none"> • T and students discuss the first part of the video in class referring to the comprehension questions that T had distributed to Ss beforehand 	T – S S – S	<ul style="list-style-type: none"> • To check Ss’ comprehension of the information in the video • To draw Ss’ attention on specific details in the video
11. Watching the second part of the video	10 min	<ul style="list-style-type: none"> • Now T asks Ss to take a look at the comprehension questions for the second part of the documentary film and have them in mind when 	T – S	<ul style="list-style-type: none"> • To get acquainted with forest ecosystems and the way they function

		<p>watching the film</p> <ul style="list-style-type: none"> Ss watch the second ten minutes of the documentary film ‘Magical Forest’ 		<ul style="list-style-type: none"> To expose Ss to authentic speech
12. Post-watching activity for the second part of the video	7 min	<ul style="list-style-type: none"> T and students discuss the second part of the video in class referring to the comprehension questions that T had distributed to Ss beforehand (see Appendix 2) T tells Ss they will watch the second half of the video during next class 		<ul style="list-style-type: none"> To check Ss’ comprehension of the information in the video To draw Ss’ attention on specific details in the video
13. Post-watching activity: Stage 2	15 min	<ul style="list-style-type: none"> T asks Ss to get in 2 large groups and try to draw a picture or a graph that will show the relationship between the components of the forest ecosystem based on the documentary film. T tells Ss they can use arrows to show the relationship, whether it is one-way or two-way relationship. T provides names of different organisms in the forest ecosystem to guide the students (Appendix 3) After they finish, a representative from each group draws their product on board Whole class discussion follows 	T – S S – S	<ul style="list-style-type: none"> To help Ss understand what complex relationships exist between organisms within the forest ecosystem To boost Ss’ creativity
Homework	5 min	<ul style="list-style-type: none"> T asks Ss to try to combine information they got from the reading and from the documentary film at home T tells Ss she will send them a reading on a reforestation project in Armenia. T asks Ss to read the text at home and be prepared to discuss it in class (Appendix 4) T tells Ss she will send all the materials to them by e-mail. 	T – S	<ul style="list-style-type: none"> To try to see how Ss can synthesize information from different sources To try to see how ready Ss are for writing reflections

SPECIES

He discovered what he thinks is a new bird **species**, a honeyeater.

FUNGUS – FUNGI

Keeping the plant too wet makes it easier for bacteria or **fungi** to establish themselves.

DECIDUOUS

As summer begins to end, **deciduous trees** begin their gradual change of leaf color.

HIBERNATION

The bear eats a lot to prepare for **hibernation**.

SCAVENGER

Because the crow has a reputation of a **scavenger**, some people are afraid of eating it.

SPORE

Truffles are mushrooms that develop underground and depend on animals eating them to **disperse** their **spores**.

SOIL

Soil erosion is a common thing in Haiti.

NUTRIENTS

They **absorb** many useful **nutrients** which supply their growth.

THREAD

The spider's **thread** works best when it is dry.

EXTRACT

As people **extract** those resources, they change the environment.

HATCH

Young newly **hatched** fish were also found on the shore.

SPAWN

Salmon fish learn where to **spawn** from the smell of the water in which they grew up.

DECAY

Tooth **decay** is common among children from poor families.

Sentences retrieved from <http://www.reference.com/example-sentences>

Magical Forest: Part 1

1. How many species live on planet Earth?
2. What do flying squirrels eat?
3. Why is it important that squirrels eat truffles?
4. How do truffles extract nutrients from the soil?
5. What is the relationship between the truffles and trees?
6. How do fungi help trees to prepare for the winter?

Magical Forest: Part 2

1. Why is there so much rain in the west coast forests of Canada?
2. How many kilograms of salmon do grizzly bears eat daily?
3. How do bears benefit from eating salmon?
4. How do flies benefit from salmon carcass?
5. What happens to the salmon carcass at the end?

First Group:

Trees

Soil

Truffles

Flying squirrels

Spores

Second Group:

Trees

Soil

Fungi

Grizzly bear

Fly

Salmon

Banana slug



Green Gold: Rebuilding Armenia's Forests

By Teodora Gaydarova

In the early 1990s, Armenia was reeling from a devastating earthquake, an ongoing war, and an economic maelstrom. Compounded with uncharacteristically harsh winters, the people cut trees to stay warm – and to stay alive. In the process, Armenia's forests were depleted. Since then, the Armenia Tree Project, which marks its 20th anniversary this year, has spearheaded a movement to reforest the country and to promote a culture of conservation.

Have you ever wondered what the price of a tree is? And how about a forest? At the onset of the 21st century Germany and the European Commission launched The Economics of Ecosystems and Biodiversity (TEEB) initiative in order to evaluate the economic benefits of biodiversity and to alert governments to the threats posed by its loss. According to the studies carried out by TEEB the loss of forests can cost economies worldwide up to \$5 trillion per year. The same study estimated the economic value of Armenian forests at a range of \$7 million to \$1 billion per year.

The value of a forest is not easy to grasp in purely monetary units. Besides quantifying how forests benefit the economy, we must also qualify the ways in which they sustain human lives. Indeed, forests procure construction timber and fuel wood for industrial purposes. Beyond that, however, forests act as air purification systems that regulate carbon levels in the atmosphere. They protect the land from floods, erosion and keep the soil fertile, which is vital for agriculture, while forest catchments provide both fresh drinking and irrigation water for agricultural lands. Forests also serve as a habitat for wild animals and are a source of fisheries, food and medicinal plants out of which medicines are derived for nearly 80% of the earth's population.

Given all of that, it is hard to imagine any area of human life or economy functioning without sustainable forests. As it often happens, though, people rarely appreciate the value of what they have until it is gone. To Carolyn Mugar, an Armenian-American, that loss was strikingly obvious when she visited Armenia in 1992. In the height of the energy embargo imposed on the country during the Artsakh (Nagorno-Karabakh) War, destitute Armenians were desperate to get fuel for simple everyday tasks. Not only were people burning anything from park benches to their own furniture and books but they were also cutting trees. Decorative trees gracing parks and pristine forest species were logged, chopped down and burned.

During the war with Azerbaijan, Armenia was denied access to the natural gas that had previously supplied up to 90% of the country's energy needs. Amid all of this, Armenia's once prospering economy was in rapid decline. After the disintegration of the Soviet Union the country had lost the huge market for its industrial produce in the face of the USSR and the systems which supported the economy. Poverty and homelessness combined with the lack of energy and fuel brought many Armenians to dire straits, while the three harsh winters of the early 90s forced people to cut down trees en masse to procure the most basic needs for heating and food preparation.

Trees saved people but forests were degraded

For a country on the verge of economic collapse, a quickly diminishing forest cover was the least of its problems. Not so much to Carolyn Mugar, who saw the long-term threat in the deforestation that was spiraling out of control. Desperate times called for urgent measures. So Mugar partnered with Regina Eddy, an expert in the development of NGOs, and in 1994 the [Armenia Tree Project](#) (ATP) was born.

In the early stages of its work, when funding and resources were scarce, ATP carried out lots of coppicing, a practice of cutting back shoots sprouting out of a stump in order to let one shoot grow back into a tree. In the eight years that followed, with financial support from the Armenian Diaspora, the organization opened tree nurseries in Karin and Khachpar, planted trees on community sites, ranging from school to church yards, and created orchards in rural areas.

In its initial stages of development, ATP's aim was to "regreen" bared parks in urban sites and plant orchards. Over the past 20 years, however, the organization has set an ambitious goal of carrying out large-scale reforestation, as well as educational and training projects with international scope. Today 60 permanent staffers in Armenia and a small team in the United States combine their efforts to restore the forest cover of the country, while still planting orchards in rural areas and decorative trees on community sites.

The efforts of locals have also played a crucial role. While ATP owns and runs a mere three nurseries, since 2004 it has partnered with hundreds of local farmers who have been growing seeds, nursing plants in their own backyards, and planting them on the land. ATP has provided the farmers with an incentive for their efforts in the form of training and monetary compensation. Thus, with the combined efforts of locals and ATP staffers trees have been planted on 900 sites in 300 communities all over the country.

To date, ATP has managed to plant more than 4.5 million trees throughout the land and to provide employment to an average of 100 seasonal workers every year.

"Communities have been very much supportive. We have enjoyed an extremely favorable reception because people recognize the benefits of trees. In fact the demand for trees by those communities exceeds our ability to meet it," says ATP's Managing Director Tom Garabedian.

Reforestation is not just about planting trees

In fact, mass-scale reforestation poses a huge challenge in terms of ensuring the survival of the planted species. In addition to securing leases on the land from the government or from local communities, ATP has to make sure that the conditions are appropriate for planting and that trees will be safe from livestock and logging. Out of the 4.5 million trees that have been planted by ATP so far, less than 65% have remained.

Managing Director Garabedian attributes the loss to natural failure in terms of sustainability of planting, poor choice of land, lack of community support in keeping livestock away from trees and other natural hazards. According to Garabedian, ATP is still learning and perfecting its methods. “The aim is to achieve a success rate of 85% after 3 years in terms of community planting and a success rate of 65% regarding large scale reforestation where there is a lack of control over natural factors,” he adds

Karen Ter Gazarian is a forestry expert whose experience includes being the deputy director of [Hayantar](#), a project of Armenia’s State Forest Service, as well as being deputy director at the Forest Research Experimental Center at Armenia’s Ministry of Nature Protection. He explains the complexity of mass-scale reforestation and regeneration. “There is a difference between planting trees and planting forests. Artificial planting always has a certain goal, be it creating a forest as a shelter belt for agricultural land or along a waterway, as part of anti-erosion measures or for lumber production.” According to Ter Gazarian artificial reforestation is costly, while natural regeneration is a far more feasible approach. Yet, both involve a wide range of expertise and procedures.

“Natural regeneration requires specialized approach of giving advice to farmers and forest managers, backing the process with legislation and evaluation of what measures can be taken and what results are achieved,” adds Ter Gazarian.

Twenty years after the collapse of the USSR scientific research in the field has been at halt, with only episodic articles and publications appearing but no solid scientific work, which, according to Ter Gazarian, is the basis for on-the-ground work in this field. “Without research we cannot make any credible judgments – research is the basis for sustainable forest management. We need more studies to be done and a lot of specialists should be involved.”

There have been some positive developments in that direction. Organizations and institutions like the [World Wildlife Fund \(WWF\) in Armenia](#), the [Acopian Center](#) at the American University of Armenia, and the United Nations Development Program (UNDP) [Climate Change Information Center of Armenia](#) do research on Armenia’s forests and, more generally, on conservation in the country.

According to Garabedian, securing support and resources from the government remains one of the major challenges ahead. The organization is funded by donations from members of the Diaspora and while the government does not offer economic support, it offers assistance in other areas. Trees planted by ATP on land leased by the government are protected from logging for 25 years.

Elsewhere forests are under threat

A study into the local forest industry by the Economy and Values Research Center revealed that barely 9% of the country’s households rely on wood fuel for their needs today. Yet, long after the end of the crisis, in the period between 1998 and 2008 the forest cover of Armenia has gone down from 12% to 8%. According to the same study the forest processing industry in Armenia, which encompasses some 300 companies, is responsible for logging 10 times more trees than the sustainable limit.

ATP believes that the loss would have been much more dramatic had it not been for the efforts of all involved. Garabedian also recognizes the need for much greater effort to be taken by the government at a much larger scale than can be accomplished by an NGO. In 2006 the organization partnered with the Armenian Forests NGO, WWF Armenia and American University of Armenia's Environmental Conservation Research Center, forming the EcoArmenia alliance.

Karen Ter Gazarian also believes that the issue is far more complex than perceived and might surpass the abilities of NGOs. "ATP have been quite active in involving and supporting communities, giving advice to farmers and inviting international experts. I see some positive steps by NGOs but the core problems still exist – illegal logging and extensive grazing harm regeneration. Financial allocations are laughable and capacity building is one of the biggest issues. Forestry management is like a very sick man to whom doctors are giving small injections."

Both local and international experts skeptical about illegal logging point out the need for more effective forestry and agricultural legislation and law enforcement to ensure the sustainable use and protection of forests. As a result of deforestation, today two thirds of Armenia are affected by erosion which is severe in some cases. Environmental issues disturb the balance of the ecosystem and the economy as people and their businesses rely on the provision of clean water and air, on the stability of the soil, the fertility of the land, and the abundance of food and timber resources.

Data from the Ministry of Nature Protection reveals that the reproductive ability of forests and their fertility has been undermined. The very pillars of the forest ecosystem which are also the most economically beneficial species – oak, beech, and ash – have been felt down on a mass scale.

Unfortunately, the more severe the deforestation effects, the more difficult it becomes for the forest to regenerate. Oaks have slower regeneration capabilities, followed by beeches. Logging and grazing pose serious threats as farm animals such as pigs eat oak acorns preventing the growth of new plants. Often simple measures such as fencing sensitive territories can help to alleviate the problem and foster natural regeneration.

Experts predict that if oaks and beeches continue to disappear they will be replaced by hornbeam, a species with far faster reproductive capabilities. "Oak forests protect the land from erosion. Once they are gone, the land will lose its fertility, biodiversity and its ability to regenerate. What we are left with is barren land," comments Ter Gazarian.

Today forestry is taught at universities worldwide, which Ter Gazarian sees as a major positive change. "Students have great ideas about how to foster and enhance the forest. They should be involved and prepared to enter the field." According to him the very profession is changing, with an overwhelming majority of forestry students at Yerevan University being female and lots of women stepping into and taking over a previously male dominated field, not only in Armenia but worldwide.

To ATP, the biggest challenge in the past two decades has been getting more people to recognize the importance and objective of reforestation.

Today, the NGO also organizes professional seminars and training for local farmers. The textbook “Plant an idea, Plant a tree” issued by ATP was approved by the Armenian National Institute of Education and successfully implemented into the curriculum of national schools – an achievement that was awarded with the National Energy Globe Award for Sustainability in 2008. Thus, while it continues to plant trees, the Armenia Tree Project is also planting ideas.

Retrieved from <http://thearmenite.com/magazine/features/green-gold-rebuilding-armenia-forests/>

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 3

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts, worksheets

By the end of the lesson students should be able to:

- Analyze and discuss information on forest ecosystems and how they work
- Evaluate information on a local reforestation project
- Identify and use synthesizing techniques
- Identify main features of reflective writing
- Practice listening and using visual clues for getting specific information
- Use guessing strategy to identify target vocabulary in context.

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up: Discussing homework	5 min	<ul style="list-style-type: none"> • T greets Ss • T tells Ss in a friendly manner that she has received completed homework assignments only from 4 people. • T asks the reason why Ss have failed to write the synthesis of the video and the reading from previous class • T reminds Ss that she sends detailed homework with necessary materials by e-mail and asks Ss to check their e-mail regularly 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson • To set the background for discussion regarding combining information from different sources and reflective writing

2. Discussion on rebuilding Armenia's Forests	10 min	<ul style="list-style-type: none"> • T and Ss discuss the reading on a reforestation project that Ss were assigned to read at home • T asks Ss if they would participate in such a project and why. 	T – S S - S	<ul style="list-style-type: none"> • To relate the discussion to local context • Help Ss analyze the reading • Develop a sense of responsibility for the environment they live in
3. Workshop on summarizing and synthesizing techniques	10 min	<ul style="list-style-type: none"> • T asks those Ss who have completed the homework assignment if they mind that their writings be discussed in class provided no names are mentioned • After receiving Ss' approval, T shows the synthesis made by Ss one by one (on PPT slides) and discusses their strong and weak points in class • T reminds Ss that a synthesis supposes combining information from different sources, rather than summarizing different pieces of information separately. T also reminds Ss that summaries and synthesis should include sentences paraphrased by Ss 	T – S S – S	<ul style="list-style-type: none"> • To help Ss differentiate between summarizing and synthesizing information • To help Ss learn by analyzing their own works, thus developing critical thinking skills
4. Pre-reading activity	2 min	<ul style="list-style-type: none"> • T asks Ss what reflective writing is and puts some ideas on the board 	T – S	<ul style="list-style-type: none"> • To introduce the notion of reflective thinking and writing
5. Reading activity: reflective writing	8 min	<ul style="list-style-type: none"> • T distributes handouts with guidelines on reflective writing and a sample reflection (see Appendix 1) • T asks Ss to quickly look through the guidelines in pairs and underline the main features of reflective writing 	T- S S – S	<ul style="list-style-type: none"> • To help Ss have an idea of the main features of reflective writing as opposed to other types • To practice scanning strategy in reading

6. Post-reading activity	10 min	<ul style="list-style-type: none"> • T randomly forms 2 large groups of 6 people • T asks Ss to discuss the reading in their groups • Then a whole-class discussion takes place 	T – S S – S	<ul style="list-style-type: none"> • To check Ss' comprehension of the text • To develop group-working skills
7. Pre-watching activity: Stage 1	5 min	<ul style="list-style-type: none"> • T asks questions from the reading and first part of the documentary film ('Magical Forest') they watched during the previous class 	T – S S – S	<ul style="list-style-type: none"> • To activate Ss' background schema • To prepare Ss for watching the second part of the documentary film
8. Pre-watching activity: Stage 2 Vocabulary	10 min	<ul style="list-style-type: none"> • T randomly asks what some target vocabulary items discussed during previous class mean • Then T shows new words on PPT slides and situations in which they are used (see Appendix 2) • T asks Ss to guess the meaning of the words • T also shows pictures with the animals that will appear in the video 	T – S S – S	<ul style="list-style-type: none"> • To check Ss' retention of previous vocabulary • To introduce potentially challenging vocabulary items to Ss before watching the video • To enrich Ss' vocabulary related to nature and ecology
9. Pre-watching activity: Stage 3	2 min	<ul style="list-style-type: none"> • T distributes comprehension questions on the video to Ss beforehand and tells them these are questions related to the first part of the video they are going to watch (See Appendix 3) • T asks Ss to take a look at the questions and have them in mind when watching the video 	T – S	<ul style="list-style-type: none"> • To prepare Ss for watching the documentary film • To guide Ss during film watching • To ease the comprehension of the film
10. Watching the first part of the video	20 min.	<ul style="list-style-type: none"> • Ss watch the first 20 minutes of the second part of the documentary film 'Magical Forest' (starting from 19:20) http://www.youtube.com/watch?v=khaYelpmePo 	T – S	<ul style="list-style-type: none"> • To get acquainted with forest ecosystems and the way they function • To expose Ss to authentic audiovisual information

11. Post-watching activity for the first part of the video	8 min	<ul style="list-style-type: none"> T and students discuss the first part of the video in class referring to the comprehension questions that T had distributed to Ss beforehand 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> To check Ss' comprehension of the information in the video To draw Ss' attention on specific details in the video
12. Watching the second part of the video	20 min	<ul style="list-style-type: none"> Now T asks Ss to take a look at the comprehension questions for the last part of the documentary film and have them in mind when watching the film Ss watch the last 20 minutes of the documentary film 'Magical Forest' 	T – S	<ul style="list-style-type: none"> To get acquainted with forest ecosystems and the way they function To expose Ss to authentic audiovisual information
13. Post-watching activity for the second part of the video	8 min	<ul style="list-style-type: none"> T and students discuss the last part of the video in class referring to the comprehension questions that T had distributed to Ss beforehand (see Appendix 3) T and Ss sum up the information they received from the whole film. 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> To check Ss' comprehension of the information in the video To draw Ss' attention on specific details in the video
14.Homework	2 min	<ul style="list-style-type: none"> T asks Ss to write a reflection based on today's class and the previous class by combining information from the reading of the previous class and the whole documentary film. T tells Ss she will send all the necessary guidelines for homework, and the materials used in class by e-mail. 	T – S	<ul style="list-style-type: none"> To check how well Ss understood the material and how well they can reflect on it critically

Guide to Reflective Writing

What is reflective writing?

Reflection is defined by the Oxford English Dictionary (2012) as “The action or process of thinking carefully or deeply about a particular subject, typically involving influence from one’s past life and experiences.” Reflection is a way of enabling self-development and deeper learning by looking back at an experience so as to learn from it and then move forward. A person may discuss learning from an experience; reflective writing takes this a stage further by putting the reflection into the more permanent and structured format of a written account and linking it to academic theory.

Why write reflectively?

Reflecting on an experience (“Reflection on action”) can help you to make links between theory and practice and between your past and present knowledge. Reflecting on and learning from your experiences can help you to avoid repeating mistakes and move away from acting automatically without thought: it will help you to identify the successful aspects of an experience, and any useful principles which can be applied to other situations.

Reflective Writing:

- provides a way by which you can make best use of an experience (turning surface learning into deep learning)
- can be used to record your progress throughout your study at University
- can improve your performance by using the outcome of reflection to inform future practice
- is a means of learning by making links between theory and your practice
- is a skill which can continue to help you develop professionally after leaving University

Features of reflective writing

Describing what happened and how you felt is only a small part of reflective writing. The emphasis as you write should be on your analysis and exploration of the experience. Reflective writing differs from most academic writing in that you will use the first person (“I”) to describe the experience and your feelings. Most reflective writing for assignments will also include an academic element so you should write in the first person (“I felt...”) for your own account and in the third person (“Jones (2010) suggests that ...”) for the theory.

Use the past tense when writing about what happened and how you felt as you are looking back on the experience (e.g. “I felt...”), but when referring to any academic theory, use the present tense as these ideas are still current (e.g. “Jones argues that...”).

As in academic writing, reflective writing requires the use of formal language, arguments supported by evidence, and fully referenced information resources.

Reflective writing looks to the future. You need to show how your reflection on what happened in the past will inform your future practice.

Your analysis of the experience should be linked to academic theory in order to give it credibility.

Reflection is an exploration and an explanation of events – not just a description of them.

- Genuinely reflective writing often involves ‘revealing’ anxieties, errors and weaknesses, as well as strengths and successes. This is fine (in fact it’s often essential!), as long as you show some understanding of possible causes, and explain how you plan to improve.
- It is normally necessary to select just the most significant parts of the event or idea on which you’re reflecting. (The next page has some suggestions on how to do this in your writing.) If you try to ‘tell the whole story’ you’re likely to use up your words on description rather than interpretation.
- It is often useful to ‘reflect forward’ to the future as well as ‘reflecting back’ on the past.

Getting started with reflective writing

Reflective writing can be more challenging than other forms of writing as it involves writing about feelings (anxieties and mistakes, as well as successes). Describing an event can help you to start writing. The next step is to then ask yourself questions about this event:

Description – What happened? Who was there?

Interpretation/analysis – What did I feel? Why did I respond in the way I did? What are the most important/relevant aspects? How does it link to theory? What went well/what didn’t?

Outcome/evaluation – What have I learned? What would I change?

There are various models you can use to help you reflect (Kolb and Gibbs, for example) but if you are required to use a particular model then use that.

Getting started with a learning journal

Your learning journal should not just describe your learning experience, but record your thoughts and feelings about your learning – what you find difficult/easy, how you manage challenges, how your attitude towards learning has changed or developed. Lecturers’ feedback could be used to list any improvements in your work or areas that you need to work on in more depth. Try to get into the habit of reflecting on your learning for all of your modules. Reading the chapter on studying effectively in Stella Cottrell’s book (see Further Reading) can help you to think about how you learn.

Tips

- Try to stand back from the event and be as objective as possible. You should be as careful in your reflective writing as you would be when writing any other assignment

- Be aware that your reflection on an event can change with the passage of time. As you reflect more and acquire more knowledge then your views may change. Your writing may also be affected by your emotional state at the time of your writing
- Start to write as soon after the event as you can. Delaying your writing may make it difficult for you to recall exactly what happened and how you felt, so your account will not be entirely accurate
- Be honest and admit to any anxieties and mistakes
- Select and use only key events and moments

Adapted from <http://www.wlv.ac.uk/lib/PDF/LS006%20Guide%20to%20Reflective%20Writing.pdf>

Example of Reflective Writing

Question: Discuss at least two things you learnt or discovered – for example about design, or working in groups or the physical world – through participating in the Impromptu Design activities.

Firstly, the most obvious thing that I discovered was the advantage of working as part of a group [1]. I learned that good teamwork is the key to success in design activities when time and resources are limited. As everyone had their own point of view, many different ideas could be produced and I found the energy of group participation made me feel more energetic about contributing something [2].

Secondly I discovered that even the simplest things on earth could be turned into something amazing if we put enough creativity and effort into working on them [1]. With the Impromptu Design activities [3] we used some simple materials such as straws, string, and balloons, but were still able to create some 'cool stuff' [4]. I learned that every design has its weaknesses and strengths and working with a group can help discover what they are. We challenged each other's preconceptions about what would and would not work. We could also see the reality of the way changing a design actually affected its performance [5].

1. Addresses the assignment question
2. Reflects on direct experiences
3. Direct reference to the course activity.
4. The style is relatively informal, yet still uses full sentences.
5. Relating to what was learnt.

Adapted from <http://www.lc.unsw.edu.au/onlib/pdf/reflective.pdf>

DEN

After their medical check, the panther kittens are returned to their *den*.

VULNERABLE

Because king penguins are at the top of the food chain, they are particularly *vulnerable* to environmental changes.

ENIGMA

The world is an enormous *enigma* that science is solving gradually.

PREDATOR

Thus begins a complex relationship between *predator* and *prey*.

CAMOUFLAGE

The polar bear's fur appears white, serving as *camouflage* against snow and ice.

DEFOLIATION

Defoliation starts in autumn.

WEAVE

Visit the town's carpet factory to watch workers while they *weave* the carpets.

CANOPY

If you're looking for a source of shade, pick a tree with a wide *canopy*.

NITROGEN

Nitrogen is one of life's crucial elements, used by all organisms to make proteins.

POLLINATION

Bees gathering nectar may accomplish *pollination*, but bees that are deliberately gathering pollen are more efficient pollinators.

Sentences retrieved from <http://www.reference.com/example-sentences>

Magical Forest: Part 1

1. What happens to the forest in winter?
2. What does the lynx eat in winter?
3. How does the snowshoe hare hide from the predators in winter?
4. What does the snowshoe hare eat?
5. What do trees start to produce in spring?
6. How do caterpillars hide from birds?
7. What is the role of the caterpillar in the forest ecosystem? Why does the lynx need a caterpillar?

Magical Forest: Part 2

1. What can the bear's hair tell us about the forest ecosystem?
2. How do scientists collect bears' hair?
3. What did the scientists find out about the bear's hair? Why was the finding surprising?
4. Why are bears so full of salmon?
5. Why is the nitrogen from the salmon found in almost all the plants in the forest?
6. Why do scientists take samples from trees?
7. How do we measure the age of the tree?
8. What did the information gathered from trees tell the scientists?
9. How do trees get water in summer?
10. What connections do fungi create in the forest? What is "wood wide web"?

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 4

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts, worksheets

By the end of the lesson students should be able to:

- Analyze and discuss information on water resource management
- Identify local environmental issues
- Practice listening and using visual clues for getting specific information
- Identify target vocabulary
- Practice team-working skills

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up: Discussing homework	10 min	<ul style="list-style-type: none"> • T greets Ss and tells them she’s received completed homework assignments only from 4 people. • T asks the reason why Ss have failed to write their reflections • T reminds Ss that she sends detailed homework with necessary materials by e-mail and asks Ss to check their e-mail regularly • T mentions some recurring errors found in the reflections without giving the names of the students who made them • T and Ss compare the erroneous sentences with the grammatical ones 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson • To develop responsibility in Ss • To help Ss improve their grammatical and vocabulary knowledge

2. Brainstorming	2 min	<ul style="list-style-type: none"> T asks Ss to brainstorm on the expressions: <ol style="list-style-type: none"> Water resource management Manmade environmental disaster 	T – S S – S	<ul style="list-style-type: none"> To prepare Ss for the topic of water resource management
3.Pre-watching activity: Stage 1	5 min	<ul style="list-style-type: none"> T writes ‘Aral Sea’ on the board and asks Ss what they know about it <ol style="list-style-type: none"> Is it a sea or a lake? What is the difference between a sea and a lake? Where is Aral Sea located? T shows a photo of the map showing the location of the lake T shows two photos of the lake taken in 1989 and 2003 respectively and asks what Ss think happened to the lake Then T shows two photos of the lake taken in 2000 and 2009 to confirm Ss’ suppositions (see Appendix 1) 	T – S S – S	<ul style="list-style-type: none"> To activate Ss’ background schema To prepare Ss for watching the documentary film
4.Pre-watching activity: Stage 2 Vocabulary	8 min	<ul style="list-style-type: none"> T distributes worksheets to Ss and tells them they are going to work in pairs and match the words that they will encounter in the film with their definitions (see Appendix 2) After reading the matching exercise, T asks Ss to bring example sentences where the words are used 	T- S S – S	<ul style="list-style-type: none"> To introduce potentially challenging vocabulary items to Ss before watching the video To enrich Ss’ vocabulary related to nature and ecology
5. Watching the documentary film	20 min	<ul style="list-style-type: none"> T tells Ss they are going to watch the documentary ‘The Shrinking of the Aral Sea: One of the Planet’s Worst Environmental Disasters’. T distributes comprehension questions on the video to Ss beforehand and asks them to take a look at the questions and have them in mind when watching the video (see Appendix 3) 	T – S	<ul style="list-style-type: none"> To get acquainted with examples of unwise water management To expose Ss to authentic audiovisual information

		<ul style="list-style-type: none"> Ss watch the 20-minute long documentary film 		
6. Post-watching activity	10 min	<ul style="list-style-type: none"> T divides Ss into random groups of 3 by counting T asks Ss to discuss the film in groups referring to the comprehension questions given beforehand Then T and Ss discuss the film in a whole class discussion 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> To check Ss' comprehension of the information in the video To draw Ss' attention on specific details in the video To develop analytical thinking skills
7. Brainstorming	5 min	<ul style="list-style-type: none"> T asks Ss to think what relation there is between Aral Sea and Lake Sevan. T asks Ss what the main difference between the two lakes is. 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> To relate knowledge they just obtained with information they have about Lake Sevan
8. Jigsaw activity	25 min	<ul style="list-style-type: none"> T tells Ss they are going to do a jigsaw activity T randomly divides Ss into 2 groups and tells them each group will receive a different piece of information about Lake Sevan (Appendix 4). One group will read about the shrinking of the lake and the other group will read about activities directed at saving the lake. After reading the information each group will choose two experts from their group who will go to the other group and share the information they read. First, information on the shrinking of the lake will be shared and then members of the other group will share information on activities directed at saving the lake T monitors the work of the groups during the whole activity Then an in-class discussion of the readings takes place 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> To introduce local environmental issues to Ss To develop group-working skills To help Ss gain more self-confidence as they act as experts
9. Pre-watching	8 min	<ul style="list-style-type: none"> T asks Ss to brainstorm what type 	<p>T – S</p>	<ul style="list-style-type: none"> To prepare Ss for

activity: Brainstorming		<p>of water is usable for people, what percentage of Earth's water is available for human consumption</p> <ul style="list-style-type: none"> • After Ss make some guesses, T shows a graph illustrating the scarcity of fresh water resources (Appendix 5) 	S – S	<p>watching the video</p> <ul style="list-style-type: none"> • To illustrate the scarcity of fresh water resources on Earth
10. Watching a short video on fresh water use	6 min	<ul style="list-style-type: none"> • Ss watch a short video on fresh water use and water shortage issues http://www.youtube.com/watch?v=XMmpg35Bym0 	T – S	<ul style="list-style-type: none"> • To get acquainted with issues of water shortage the Earth faces
11. Post-watching activity	6 min	<ul style="list-style-type: none"> • T asks Ss what they can do to conserve water at home or in their neighborhood • T writes Ss' ideas on the board 	T – S S – S	<ul style="list-style-type: none"> • To make Ss critically aware of the issue • To give Ss opportunity to think analytically
12. Video-production discussion	10 min	<ul style="list-style-type: none"> • T asks Ss if they remember from the syllabus that they are going to create their own videos at the end of the course • T explains Ss that these videos should be a call for action apart from presenting a mere description of a problem. • T asks Ss what they think are the main stages of video production • Then T shows the main stages on a PPT slide: <ul style="list-style-type: none"> ○ Scripting ○ Shooting ○ Editing • T and Ss discuss briefly what each stage represents • T tells Ss they are going to be divided into 3 groups and prepare a workshop on each of the above-mentioned stages: <ul style="list-style-type: none"> ○ Group 1 – Scripting ○ Group 2 – Shooting ○ Group 3 – Editing • Ss are placed in a particular group based on their preference 	T – S S – S	<ul style="list-style-type: none"> • To prepare Ss for the video production process • To help Ss act as experts, rather than passive absorbers of T's knowledge • To boost Ss' creativity in finding best ways to organize a successful workshop

		<ul style="list-style-type: none"> • After groups are formed, T asks Group 1 to prepare a 10-minute workshop on the scripting stage for next class • T tells Ss she will share resources with them and assist them in preparing the workshop when necessary 		
13.Homework	5 min	<ul style="list-style-type: none"> • T asks Ss to write a reflection based on the documentary film, the reading and class discussion • T tells Ss she will send all the necessary guidelines for homework, and the materials used in class by e-mail. 	T – S	<ul style="list-style-type: none"> • To check how well Ss understood the material and how well they can reflect on it critically

APPENDIX 1



July - September, 1989



August 12, 2003

Retrieved from <http://earthobservatory.nasa.gov/IOTD/view.php?id=3730>



Retrieved from <http://www.treehugger.com/natural-sciences/nasa-documents-the-evaporation-of-the-aral-sea-2000-2009.html>

Match the words with the definitions.

1. Landlocked	a) To mix with the liquid and become part of the liquid
2. Evaporate	b) a barrier preventing the flow of water
3. Shrink	c) To convert or change into a vapor
4. Dust	d) The watering of land by artificial means for fostering plant growth
5. Dissolve	e) Entirely or almost entirely surrounded by land
6. Irrigation	f) As stream feeding a larger stream or lake
7. Dam	g) To become reduced in amount or value
8. Tributary	h) To change the direction or use of something
9. Divert	i) Fine, dry particles of matter

Definitions retrieved from <http://www.merriam-webster.com/dictionary>

1. How many rivers provide water to the Aral Sea?
2. What was the aim of the water projects carried out by the Soviet Union?
3. What was the water of the rivers used for?
4. How much had the level of the lake dropped by 1989?
5. What consequences did the water shrinking bring to?
6. Which one is better preserved – Northern Aral Sea or Southern Aral Sea?
7. Why was the Karakum Canal built and what happened after it was built?
8. How much water does the Karakum Canal take from the Amu Darya river?
9. How large is Aral Sea now compared to its original size?
10. What is the water of Syr Darya river used for?
11. Why is the cooperation of countries of Central Asia important for their development?
12. What happens now when the wind blows?
13. Where are the winds from the desert (where Aral Sea was located before) reaching?
14. What illnesses are people in this desert suffering from?
15. What do people try to do to make the disastrous effects of the catastrophe smaller?
16. What impact has the Aral Sea disaster had on climate?
17. What is being done now by the Government of Kazakhstan?

GROUP 1

General overview of the problem

Lake Sevan is in the central part of the Republic of Armenia, at an altitude of 1900m above sea level. The total surface area of its catchment basin is about 5000 km², the lake surface itself is 1200 km², and the volume is 35.8 billion cubic meters. The lake is fed by 28 rivers in its catchment area, and only one, the Hrazdan River, flows out of the lake.

Lake Sevan is the only large water body of Armenia and has an important role in the water balance of the whole South Caucasus as well as the northern regions of Iran and Turkey. It is the main strategic supply source of drinking water for Armenia and neighboring countries.

The use of lake waters for irrigation started in 19th century, and from the beginning of 20th century its waters were also used for energy production, to address the country's energy deficit. Drawdown of the water level in the lake began in the 1930s.

The original scheme at this time planned to direct lake waters through the Hrazdan River to the Ararat Valley, to irrigate 100 000 ha of land. Over 50-60 years, the water level in the lake was expected to fall up to 50 meters, corresponding to 93% of its volume (54.55 cubic meters), and completely draining the Big Sevan. If this plan had been followed, the water level would have fallen by 6 times.

Based on this scheme, facilities to use Lake Sevan's water were built, including an irrigation system for 80 000 ha; the Sevan-Hrazdan hydroelectric power station, with total power of 556 000 kilowatt, was finished in 1962 with the completion of last step of a series of hydroelectric power stations for Yerevan.

The Lake's water level started falling in 1933, when the drainage of its waters for economic use exceeded the natural yearly inflow. More intensive use began in 1949. In 1953, 1.75 billion cubic meters were taken.

Before the water level of Sevan started falling, the lake was an oligotrophic reservoir with a slow release of its waters, with a complete renewal every 44.3 years, high water clarity (average of 13-14 meters) and high oxygen levels during the year.

As a result of this brutal use of water, the level of the lake has fallen by 19.6 meters, its volume of water from 58.5 billion cubic meters to 33.0 billion cubic meters, and its area from 1416.2 km² to 1238.1 km². During the years of most intensive water use (1949-1962), the water level fell 13 meters (1m per year).

From an environmental point of view, this quick reduction in water level played a key role in the destabilization of the lake's ecological indicators, which led to the following negative consequences: reduction in water temperature stratification, reducing the hypolimnion volume up to 50% in the Small Sevan (from 13 km² up to 6 km²) and its complete disappearing in the Big Sevan.

The reduction in the hypolimnion raised the average temperature of the lake by up to two degrees, increasing the longevity and intensity of horizontal and vertical flows. As a consequence, concentrations of suspended and dissolved organic substances increased several times in the upper and middle water layers of the lake. Concentrations of minerals and general nitrogen in the lake increased up to 30 times (from 0.01 till 0.32 g/m³), and the concentration of phosphorus decreased 20 times (from 0.32 to 0.017 g/m³). Water clarity, which plays crucial role in physical-chemical and biological processes, decreased by four times (from 13 to 3 m). Major changes in biodiversity occurred. Spawning Sevan trout disappeared in the aquatic part of the ecotone. In the period from 1993 till 1995, a mass death of whitefish was observed, due mainly to the reduction of their food base within the framework of the general ecological situation in the Sevan ecosystems. In the shore part of the ecotone of the lake, as consequence of the drying of more than 1000 ha of wetland areas, out of the 167 species of endemic and migrating birds once present 18 are now found. The number of mammal species has fallen sharply. At present, there is an intensive process of desertification. The reintroduction of lost elements is a very important precondition for the ecological restoration of the lake.

GROUP 2

Activities to manage Lake Sevan issues

To increase the water level of the lake, it is necessary to increase water inflows, using flows from neighboring water basins, and to reduce outflows of water. For this purpose, in 1962 major construction was started for infrastructure to transfer part of the Arpa River flow to the lake. It was planned to transfer about 250 million of cubic meters of water per year to the lake. The Arpa-Sevan Tunnel was inaugurated in 1981.

To change the output of the Sevan-Hrazdan system, a new hydroelectric power station was built. For irrigation, part of the water coming from the lake was exchanged with waters from the Ararat Valley. These measures allowed, beginning in 1965, a significant reduction of lake water outflows, bringing outflows of water down to 500 million cubic meters per year, of which 380 million cubic meters were used for irrigation and 120 million cubic meters for energy production. Energy use stopped in 1978. After these measures, the lake level increased to 0.9 meters from 1981-1990.

From 1991 to 2000, as the result of use of water during the energy crisis, the level of the lake again decreased by 1.5 meters.

To increase water inflows to the lake, after the completion of the Arpa-Sevan Tunnel, construction of the Vorotan-Arpa Tunnel began. This should supplement the lake with 165

million cubic meters of water per year. Construction of the Vorotan-Arpa Tunnel is planned to finish in 2003.

According to the yearly water balance of the lake, because of the above-mentioned transfers, and without other changes in the balance water, the lake's level should increase up to 12 cm per year. To improve Lake Sevan's conditions, from 1996 to 1998, with the financial help of World Bank, the Program of Reconstruction of the Ecological Balance of Lake Sevan was prepared. This included improvements in legislation and management to increase the lake's water level, reduce pollution in the drainage basin, improve industrial and other waste management, reduce of non-point source pollution, protect the reproduction of fish supplies and provide biodiversity protection.

Considering the importance of Sevan for the Republic, in 2001 the National Parliament of the Republic of Armenia adopted the Law on Lake Sevan. Based on this law, Lake Sevan is now considered an environmental, economic, social, scientific, historical-cultural, esthetic, health, climatic, recreational and cultural entity that has strategic significance as a source of drinking water. Each year, complex programs of measures with regard to the ecosystem, reconstruction, protection, reproduction and use of Lake Sevan are to be elaborated and adopted.

In 2002, outflows from the Sevan were only 98.3 million cubic meters of water. Since the 1930s, massive outflows from Lake Sevan began, there hasn't been such a low removal of water. Comparison with 2001, Lake Sevan's water level increased 44-45cm.

Adapted from

<http://www.unece.org/fileadmin/DAM/env/europe/monitoring/Armenia/en/Part%20IV%20-%20Ch.2.pdf>

Water on Earth



Retrieved from:

<http://www.aid-n.com/earths-water-resources-in-the-world/earths-water-resources-water-on-earth/>

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 5

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts.

By the end of the lesson students should be able to:

- Analyze and discuss information on mining and related issues
- Practice listening and using visual clues for getting specific information
- Practice scanning strategy in reading
- Practice creative thinking skills
- Practice team-working skills
- Practice writing persuasive and creative appeals
- Recognize the main features of the pre-production stage in video production

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up: Discussing homework	10 min	<ul style="list-style-type: none"> • T mentions some recurring errors found in the reflections without giving the names of the students who made them • T and Ss compare the erroneous sentences with the grammatical ones 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson • To help Ss improve their grammatical and vocabulary knowledge
2. Brainstorming	5 min	<ul style="list-style-type: none"> • T writes the word “Mining” on the board and asks Ss to remind what mining is • T asks Ss to think of positive and negative aspects of mining • T writes Ss’ answers on the board under the categories “positive” and “negative”. 	T – S S – S <ul style="list-style-type: none"> • To prepare Ss for the topic of discussion of the day

3.Pre-watching activity: Stage 1	5 min	<ul style="list-style-type: none"> • T shows South Pacific Islands on the map and asks Ss what they know about the islands, the climate, habits of their population (Appendix 1) • T tells Ss they are going to talk about a small South Pacific island called Nauru. T shows Nauru Island on the map • T shows photos of Nauru island taken before and recently (Appendix 2) • T asks Ss what they think has happened to it. 	T – S S – S	<ul style="list-style-type: none"> • To activate Ss’ background schema • To prepare Ss for watching the documentary film
4.Pre-watching activity: Stage 2	5 min	<ul style="list-style-type: none"> • T asks Ss whether they have ever heard about phosphate mining and what phosphate is used for • T shows the main uses of phosphate on a PPT slide and asks Ss to read the bullet points (Appendix 3) • T and Ss discuss the various uses of phosphate 	T- S S – S	<ul style="list-style-type: none"> • To introduce the key term necessary to understand the film • To create certain expectations about content of the film among students
5. Watching the documentary film	10 min	<ul style="list-style-type: none"> • T tells Ss they are going to watch the documentary “Nauru: Island Raiders” http://www.youtube.com/watch?v=8OB6xliWNmo • T distributes comprehension questions on the video to Ss beforehand and asks them to take a look at the questions and have them in mind when watching the video (see Appendix 4) • Ss watch the 8-minute long documentary film 	T – S	<ul style="list-style-type: none"> • To get acquainted with an example of unsparing use of Earth resources • To expose Ss to authentic audiovisual information
6. Post-watching activity	7 min	<ul style="list-style-type: none"> • T and Ss discuss the comprehension questions they were distributed before watching the video • T asks Ss what lessons we can 	T – S S – S	<ul style="list-style-type: none"> • To ensure Ss digested the information contained in the documentary

		learn from the sad example of Nauru		<ul style="list-style-type: none"> • T incite discussion on the film
7.Pre-reading activity: Brainstorming	5 min	<ul style="list-style-type: none"> • T asks Ss what other problems could Nauru residents face given the fact they live in a South Pacific Island which is near the equator, which is on the sea level and which does not have lakes or rivers 	T – S S – S	<ul style="list-style-type: none"> • To activate Ss' content schemata • To prepare Ss for the reading text
8.Reading activity	5 min	<ul style="list-style-type: none"> • T distributes handouts with an article about Nauru (see Appendix 5) • T asks Ss to scan the text and find and underline any additional problems Nauru island and its population face 	T – S S – S	<ul style="list-style-type: none"> • To help Ss practice the scanning strategy • To raise the Ss' awareness of the indirect consequences of mining
9. Post-reading activity: Discussion	10 min	<ul style="list-style-type: none"> • T and Ss discuss the additional problems of the residents of the Nauru island • T asks Ss to work in pairs for a couple of minutes and come up with solutions to some problems 	T – S S – S	<ul style="list-style-type: none"> • To identify chain reactions • To develop Ss' analytical thinking
10. Pre-writing activity	10 min	<ul style="list-style-type: none"> • T randomly forms groups of three • T distributes handouts with some environmental posters to the groups (Appendix 6) • T asks the groups to analyze the posters in terms of language and visuals used in them, and the message they convey • Class discussion follows 	T – S S – S	<ul style="list-style-type: none"> • To help Ss develop critical thinking skills • To prepare Ss for the writing activity
11. Writing activity	10 min	<ul style="list-style-type: none"> • T distributes large blank sheets of papers and markers to each group • T asks Ss to work in their groups and prepare a “call for action” environmental poster on any topic they like 	T – S S – S	<ul style="list-style-type: none"> • To practice using the specific style of language and vocabulary • To develop Ss' creativity

12. Post-writing activity	10 min	<ul style="list-style-type: none"> • Groups present their posters to the class • Ss give feedback to each other 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> • To promote sharing of knowledge and creative ideas • To promote the idea of usefulness of peer feedback
13. Video production workshop: Scripting stage	10 min	<ul style="list-style-type: none"> • The group responsible for preparing a workshop about the scripting stage of video production presents the materials they have prepared • T helps them during the workshop • A short question-and- answer session follows • T gives feedback and asks Group 2 to prepare a workshop on the shooting stage for next class. T also asks Ss to start working in their groups, think of a topic and start the scripting stage 	<p>T – S</p> <p>S – S</p>	<ul style="list-style-type: none"> • To help Ss practice collaborative learning • To help Ss understand the main features of the pre-production stage
14. Homework	5 min	<ul style="list-style-type: none"> • T asks Ss to write a reflection on class discussion at home. 	T – S	



Retrieved from <http://www.beautifulpacific.com/south-pacific-islands.php>

BEFORE



Retrieved from <http://www.un.int/nauru/countryprofile.html>

NOW



Retrieved from:
http://www.thestar.com/news/world/2012/05/27/how_a_tiny_pacific_island_went_from_tropical_paradise_to_facing_oblivion.html

Uses of Phosphate

Plants need phosphate to stimulate healthy root development for flowering and to help in the prevention of disease and stress. Phosphate helps in root stimulation and flowering of plants.

Because of its high value as a nutrient, phosphate is widely used in the manufacturing of animal feed supplements.

Phosphates are used in many foods including dairy, meat, bakery products and soft drinks.

Phosphates are also used as a main component of domestic dishwasher detergents, as well as in industrial detergents and specialist industrial cleaning products.

Adapted from <https://uk.answers.yahoo.com/question/index?qid=20100127023546Aag7YkS>

APPENDIX 4

1. When and how did Nauru Island appear on Earth?
2. What was the main wealth of the nature?
3. What is phosphate used for?
4. How did phosphate gather on the rocks of the island?
5. How much damage has phosphate mining caused to the soil of the island?
6. How long did it take the natural habitat of Nauru to die?
7. What did the Government do with the money they got from phosphate mining?
8. What risky plan does the Government of Nauru have?
9. Why don't people of Nauru want to leave their island?
10. What lessons can we learn from the example of Nauru?

UN's Tiniest Nation: "Help! We're Drowning"

The Nauru emissary sends out a climate change SOS to Cancun negotiators.

—By **Kate Sheppard**

| Wed Dec. 8, 2010 3:00 AM GMT



It's safe to say that many Americans have never heard of Nauru, the Micronesian island in the South Pacific. It's the smallest member of the United Nations, constituting just 8.1 square miles with 10,000 citizens. It's also one of the low-lying islands already facing direct threats from the warming planet.

Residents of Nauru face very specific challenges. Germany claimed the island as a colony in the late 19th century. In the early 20th century, the Nauru became a hotbed for phosphate mining, with foreign companies extracting its vast deposits. The mining left a legacy of pollution, contaminating 70 percent of the island and leaving it uninhabitable. The country won independence in 1968 and bought back the phosphate industry in 1970, but the toxic bequeathal means the entire population lives at the edge of the land, just a few meters above sea level.

This leaves the residents at particular risk as the sea creeps slowly upward. The contamination also leaves the country unable to tap groundwater, so residents rely on rainfall for drinking water—rainfall that has become increasingly unpredictable in recent years. "Climate change is more than polar bears. Climate change is very, very real to us. We live it every day," says Marlene Moses, Nauru's ambassador to the United Nations. The concerns are numerous, says Moses: "The threat of uncertainty of our future, the threat of uncertainty to what may come of us, whether we will still be here in 20, 30 years' time, whether our island, whether our republic, whether our sovereign nation will still be here."

I sat down with Moses at the climate talks in Cancun to talk about the challenges and opportunities for change that she sees for her nation.

Mother Jones: What impacts are you seeing at home already?

Marlene Moses: We are seeing coastal erosion and great threats to our water resources.. Nauru does not have any lakes or any rivers. Our underground water is contaminated, so fresh clean water, it's either imported or we depend on rain. When there are high tides, it floods right into the homes of people. With climate change, with unpredictable weather patterns, it brings all sorts of diseases. We just don't have the capacity to cope with that, and we should not be expected to cope with that.

MJ: What are folks doing to deal with and prepare for impacts?

MM: We have very little option at home to prepare for these things. And to tell you the truth, the term climate change is also something that is very new to the people. So with the coastal erosion, droughts we experience, shortage of water—to them it's this phenomenon that they cannot understand. Some of them perhaps don't realize what climate change is really about. To them it's part of life. I think that's very hard for someone who is a negotiator within this process to understand, unless you actually come from an island.

In terms of relocation, it is something we are not considering at the moment. No one can really talk about uprooting yourself to live in a foreign land. It is a very sensitive subject to be discussed, because for us there is even no option internal relocation.

MJ: Are the voices of small island states being heard in the UN in negotiations?

MM: Yes, I think our voices are being heard, but whether they're taking our issues on board, whether they're actually listening, whether they're actually realizing is another issue. I think sometimes we just go in a negotiating room blindly without really understanding the depth of the challenges and the problems and the vulnerability of your partners.

There's been a lot of conversation. It's action we need. I think it's becoming rhetoric, but that's no comfort for us who are living the reality of climate change. I just don't know how much further I can stress that fact. I do wonder how many have actually visited our region. When you talk about climate change to the world community, they think of polar bears automatically. They totally forget that out in the Pacific Ocean there are actually millions of people, cultures, languages, traditions that are being threatened by something caused by man and something we've had very little to do with.

Adapted from <http://www.motherjones.com/environment/2010/12/climate-change-nauru-cancun>

**"WHAT HAPPENS IN THE ARCTIC
DOESN'T STAY IN THE ARCTIC."**
- Kumi Naidoo, Greenpeace International Head

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IN THE OCEAN
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**IT IS THE
GREATEST OF
ALL MISTAKES
TO DO NOTHING
BECAUSE YOU
CAN ONLY
DO LITTLE**

DO WHAT YOU CAN
- SYDNEY SMITH

PLASTIC **COMPOST** **PAPER**

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RIDE YOUR BIKE
SAVE THE WORLD**

HIZOKU CYCLES

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 6

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts.

By the end of the lesson students should be able to:

- Analyze and discuss information on mining in Armenia
- Practice listening and using visual clues for getting specific information
- Practice scanning strategy in reading
- Identify target vocabulary and use it during the discussion
- Practice team-working skills
- Identify structure and rules of debates
- Identify skills and best practices in producing videos

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up: Discussion on homework-	2 min	<ul style="list-style-type: none"> • T greets Ss • T asks those who haven't written their reflections to take two minutes and write the reason for not writing on a piece of paper. T tells Ss it is anonymous • T takes the pieces of paper from Ss 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson • To understand the reason why Ss fail to write reflections at home
2. Brainstorming	8 min	<ul style="list-style-type: none"> • T asks Ss to brainstorm on what environmental problems exist in Armenia • T asks Ss to come and write their ideas on the board • Then T adds any environmental problems Ss haven't mentioned 	T – S S – S <ul style="list-style-type: none"> • To raise Ss' awareness on environmental problems Armenia faces • To prepare Ss for today's discussion

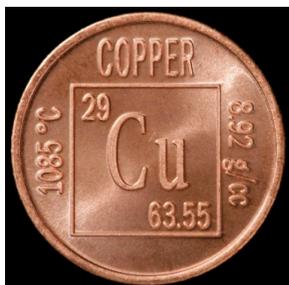
		<p>(deforestation, loss of biodiversity, pollution of water resources, soil intoxication, mining)</p> <ul style="list-style-type: none"> • Short discussion takes place on each of them 		
3.Pre-watching activity: Brainstorming	5 min	<ul style="list-style-type: none"> • T reminds Ss that Armenia is rich in copper and molybdenum • T asks Ss to discuss in pairs and tell what uses copper and molybdenum can have 	T – S S – S	<ul style="list-style-type: none"> • To activate Ss’ background schema • To prepare Ss for the jigsaw activity and for watching the documentary
4.Pre-watching activity: Jigsaw activity	15 min	<ul style="list-style-type: none"> • T randomly divides Ss in 2 large groups • T tells Ss one group will do a reading on uses of copper, the other group will get information about uses of molybdenum (Appendix 1). • After reading and analyzing the information, each group will choose two experts from their group who will go to the other group and share the information they got from the reading. The same procedure will be followed by the other group • T monitors the work of the groups during the whole activity • Then a whole-class discussion of the readings takes place 	T- S S – S	<ul style="list-style-type: none"> • To help Ss understand why copper and molybdenum have such value and a demand • To develop group-working skills • To help Ss gain more self-confidence as they act as experts
5. Watching the documentary film	30 min	<ul style="list-style-type: none"> • T asks Ss what they know about the mining activity in the Syunik region of Armenia • T tells Ss they are going to watch the documentary ‘Mining is a Threat to Syunik’ in Armenian with English subtitles http://www.youtube.com/watch?v=QykGXzUahyc • T asks Ss to take notes while watching the video because they 	T – S	<ul style="list-style-type: none"> • To get acquainted with the problem of irresponsible mining in Armenia and its consequences • To make Ss more environmentally aware and responsible citizens of their country

		<p>are going to write their opinion about the film after watching it</p> <ul style="list-style-type: none"> • Ss watch the 30-minute long documentary film 		
6. Post-watching activity: Stage 1 Vocabulary	5 min	<ul style="list-style-type: none"> • T shows Ss some important vocabulary items they encountered in the subtitles of the video on PPT slides (Appendix 2) • Ss guess the meaning of the words 	T – S	<ul style="list-style-type: none"> • To prepare Ss for the subsequent writing activity and the video discussion
7. Post-watching activity: Stage 2 Writing	10 min	<ul style="list-style-type: none"> • T asks Ss to take two-three minutes and write what they think about whatever they saw in the film and what impressed them most of all • Then Ss share what they've written with the class (if they want) 	T – S	<ul style="list-style-type: none"> • To help shy Ss express their feelings in writing
8. Post-watching activity: Stage 3 Discussion	10 min	<ul style="list-style-type: none"> • T asks Ss some comprehension questions on the film (Appendix 3) • T distributes handouts with some ideas and evaluations of the situation in Syunik expressed by environmentalists in the video (Appendix 4) • T asks Ss to discuss them in groups of 2-3 • Then whole class discussion takes place 	T – S S – S	<ul style="list-style-type: none"> • To ensure Ss digested the information contained in the documentary • To incite discussion on the film
9. Preparation for the simulation game: Stage 1	15 min	<ul style="list-style-type: none"> • T tells Ss that during next class they are going to have a simulation game (role-play debate) on the topic of copper mining in Armenia • T tells Ss there will be 4 groups: <ul style="list-style-type: none"> - Government - environmental activists - mining company - villagers • T and Ss decide on the roles of Ss and form groups accordingly • T distributes debate guidelines to Ss and explains what format the debate 	T – S S – S	<ul style="list-style-type: none"> • To prepare Ss for the simulation game for next class • To make the format and requirements clear to Ss

		<p>is going to have (Appendix 5)</p> <ul style="list-style-type: none"> • T and Ss discuss the guidelines • T and Ss go through the grading rubric for the simulation game and discuss any unclear items there (Appendix 6) • T tells Ss their first step should be researching the topic at home again and finding any relevant information in the internet. • T encourages Ss to meet in their groups before the role-play for next class 		
10. Preparation for the simulation game: Stage 2	8 min	<ul style="list-style-type: none"> • T asks Ss to work in their groups and develop at least 3 arguments in favor of their position and justify them • T approaches Ss and provides guidance 	T – S S – S	<ul style="list-style-type: none"> • To give Ss opportunity to prepare the draft of their speech • To give necessary guidance and advice to Ss
11. Video production workshop: Shooting stage	10 min	<ul style="list-style-type: none"> • The group responsible for preparing a workshop about the shooting stage of video production present the materials they have prepared • T helps them during the workshop • A short question-and- answer session follows • T gives feedback and asks Group 3 to prepare a workshop on the shooting stage for Lesson 9 • T encourages the Ss to start shooting their videos if they've already done the scripting 	T – S S – S	<ul style="list-style-type: none"> • To help Ss practice collaborative learning • To help Ss gain knowledge and skills for the actual production stage
12. Homework	2 min	<ul style="list-style-type: none"> • T asks Ss to write a reflection on class discussion • T tells Ss she will send them useful debate vocabulary that they will be able to use during the simulation 	T – S	

		<p>game (Appendix 7)</p> <ul style="list-style-type: none">• T also tells Ss she will send them the video on Mining in Syunik region to use it in preparing their arguments• T encourages Ss to use the internet in searching for valid arguments in favor of their point		
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USES OF COPPER



Since it was first used in 8000 B.C, people have discovered different uses of copper. Tools made of this element helped advance civilization during the Stone Age. Since that time, it has become an integral part of many industries.

Architectural Applications

Copper is heavily employed in the construction industry. It is commonly found in buildings because it is waterproof.

Industrial Applications

The metal's high ductility makes it a practical tool for industrial use. It is the third most widely used metal in industries next to aluminum and iron. It is commonly used in shipbuilding. The metal is alloyed with nickel which helps it withstand corrosion.

Uses of Copper in Electricity

More than half of the copper produced is for electricity. Its core functions are transmission of electricity and power generation. Properly set the metal produces electricity efficiently and safely. The metal is also used in wiring and electrical equipment. It is present in mobile phones, TV and computers.

Application in Transportation

The element is used in construction of trains, cars, lorries and other vehicles.

Biological Applications

Other uses of copper include being a nutrient for animals and plants. Traces of the metal can be found in bone, muscles, liver and tissues. The ancients were aware of its antibacterial properties. Modern medicine applies copper bracelets to reduce arthritis and joint pains.

Supply and Demand

Demand has grown the past two decades. The biggest demand has come from developing nations. The biggest producer is the Andean region of South America. Almost half the world's copper comes from the Andes. About 9% comes from America. The metal is recyclable, another of its major attractions. The metal can be reprocessed and re-melted too. This can be done without affecting its properties.

Adapted from <http://www.usesof.net/uses-of-copper.html>

USES OF MOLYBDENUM

Molybdenum is the 42nd element on the periodic table and its symbol is Mo. It is a silvery metal and has the sixth highest melting point of any elements, demonstrating its possible uses in construction and metals. While molybdenum is not traditionally found in many household products, this is beginning to shift slightly and new uses are constantly being found. Currently, the main use of Molybdenum is in the commercial and industrial industries where it plays a large role in manufacturing. Due to its relative strength and heat resistance it is also used by both the military and in space exploration.



Molybdenum

Discovered in 1778 by Swedish chemist Carl Wilhelm Scheele, there was no viable use of Molybdenum for over a century. This was due to its scarcity and difficulty in extracting the pure element. It wasn't until 1906 when it found its potential use; used as a heating element for furnaces and as a support for tungsten light bulbs.

During World War One, demand for Molybdenum increased dramatically. Molybdenum was used as armor plating for tanks, other military vehicles and also as a substitute for tungsten. After the war, its demand dropped and it wasn't until World War Two where it again had an important role.

Molybdenum has the ability to withstand extremely high temperatures without its shape changing, expanding or softening significantly. This ability makes its involvement in high heat situations very useful. It is used in manufacturing of armor, aircraft parts, industrial motors, and electrical contacts.

Factoring in its use in construction steel, tool and high-speed steel and in cast iron, more than 50% of Molybdenum is used in the manufacturing of Molybdenum grade allow steel and iron. Within the chemical component of molybdenum's use, it is commonly used as a smoke suppressant and as mentioned, lubricants where it performs exceptionally well in comparison to other lubricants. Use of molybdenum is also important in agriculture. It is especially useful in the growing of cauliflower.

Adapted from <http://www.useofmolybdenum.net/>

APPENDIX 2

- Tailing Dump
- Concrete
- Contaminate
- Wastewaters
- Maintenance norms
- Vanish
- Exploit

Comprehension questions

1. What is the copper and molybdenum plant in Agarak doing to the nearby rivers?
2. How does contaminated water reach fruit trees?
3. Have tailing dumps been constructed taking into account safety measures? What important safety rules have constructors violated?
4. What happens when dams are not built with concrete? What happens to the trees and the soil near the tailing dump?
5. Are mining licenses still being given to companies by the Government?
6. How did the mining company cheat the villagers?
7. What danger exists for the drinking water in the region?
8. What is the Ministry of Nature Protection been doing since 2002?
9. What health problems do the people of the region have due to mining?
10. Do tailing dumps still threaten the environment after mining activity stops?

Discuss the following statements made in the video:

- a. The Government doesn't do anything to control the companies that violate environmental norms.
- b. Water resources feed the whole plant and animal life. If they are polluted, both plants and animals are threatened.
- c. 'Mining should be in moderate scale and not be in the hands of the private sector.

Rules for Classroom Debate

1. Each group is to agree on two to three significant points of argument.
2. The “pro” group will read the first point of argument. A debate on the validity of that particular point will continue, providing others in the group opportunities to elaborate and the “con” group opportunities to counter.
3. One person speaks at a time. No side discussions!
4. All comments **MUST** address the previous student **comment directly**. You may not simply ignore a comment and shift the argument to an unrelated point.

Debate Etiquette

1. Team members must meet together in preparation for the debate, so they can work together as an effective team. Practice, practice, practice!
2. All members of each side must participate in the debate.
3. Do not read your materials.
4. You may bring some brief notes, but you may not read them.
5. Maintain good eye contact with the audience.
6. Use proper language and be polite in referring to your opposing team.
7. The pro team should write the topic on the board before class begins, listing the names of each pro and con debater in a clear fashion.

Structure for the Mining Debate

STAGE 1: Total Time Allowance: 15 minutes		
“Pro” (MC) Point #1	“Con” (EA) Objection to Point #1	“Pro” (MC) Rebuttal to Point #1
“Pro” (MC) Point #2 to Point #2	“Con” (EA) Objection to Point #2	“Pro” (MC) Rebuttal to Point #2
“Pro” (MC) Point #3	“Con” (EA) Objection to Point #3	“Pro” (MC) Rebuttal to Point #3
Total Time Allowance: 5 minutes		
Questions or comments from the Government		
Questions or comments from the villagers		

STAGE 2: Total Time Allowance: 15 minutes		
“Con” (EA) Point #1	“Pro” (MC) Objection to Point #1	“Con” (EA) Rebuttal to Point #1
“Con” (EA) Point #2	“Pro” (MC) Objection to Point #2	“Con” (EA) Rebuttal to Point #2
“Con” (EA) Point #3	“Pro” (MC) Objection to Point #3	“Con” (EA) Rebuttal to Point #3
Total Time Allowance: 5 minutes		
Questions or comments from the Government		
Questions or comments from the villagers		

STAGE 3: Total Time Allowance: 5 minutes

5. “Pro” (MC) Concluding Remarks
6. “Con” (EA) Concluding Remarks
7. Villagers – Concluding Remarks

GOVERNMENT DECISION

(5 min)

GRADING RUBRIC FOR THE SIMULATION GAME

Speakers clearly understood the topic in depth and presented their information convincingly	2
The speakers' statements clearly supported their position in the debate	2
The main ideas and arguments were well-supported with facts and examples	2
Each team member knew his/her subject well	1
Speakers were prepared and used notes minimally	2
Objections were specific to opposing arguments, expressed with clarity and showed evidence of good listening skills	2
Speakers consistently used gestures, eye contact	1
Speakers stayed within time limits	1
Speakers showed respect to each other	1
Each team member participated actively in the debate	1
TOTAL: 15 POINTS	

Outlook: Useful Debate Vocabulary

I'm listening to the other side.

I see your point, but I think...

Yes, I understand, but my opinion is that...

That's all very interesting, but the problem is that...

I'm afraid I can't quite agree with your point.-

I think I've got your point, now let me respond to it.-

We can see what you're saying. Here's my reply...

"I need to say something now."

I'm sorry to interrupt, but you've misunderstood our point.-

Excuse me, but that's not quite correct.-

Sorry, I just have to disagree with your point.-

Let me just respond to that, please.-

Forgive me for interrupting, but I must respond to that.-

Hold on a moment, that's not correct.-

If you would allow me to add a comment here...-

You haven't replied yet.

The other side will have to explain why.... otherwise we win that point.-

We said that...but the other side has not replied to our point.-

I'd like to focus on two points that the other side has failed to address.-

There are two points that we have succeeded in establishing...

I want to call your attention to an important point that our opponents have not addressed yet.-

I'd like to point out that there are two issues our opponents have failed to dispute, namely...

I must stress again that our point has not been refuted by the other side.

"Well, I think that..."

The first point I would like to raise is this...

Our position is the following...

Here's the main point I want to raise...

I'd like to deal with two points here. The first is...

Our opponents have still not addressed the question we raised a moment ago...

The other side has failed to answer our point about...

Notice that the affirmative side has not addressed our main point.-

Let me just restate my position.-

Just to be clear, here is what I mean...

"So finally, we..."

To sum up, here are the main points our opponents have not addressed...

We pointed out that...

Our opponents have claimed that...

Let's sum up where we stand in this debate.

Let me summarize our position in this debate...

In summary, we want to point out that...

Let's see which arguments are still standing.

(1) When you start saying something / contributing to a conversation

First of all, I would like to say/state that
To begin with, I
In the first line, I

(2) What can you say instead of "I think"

I would say/think
In my opinion
To my mind
I am of the opinion that
I hold the opinion that

(3) When you want to stress your "personal opinion":

Personally I think
As far as I am concerned
As for me
As I take it
As far as I can see

(4) When you "agree" or when you "don't agree":

I entirely/quite agree with you.
I agree to (with) her plan.
I am of the same opinion.
I differ from/with you entirely.
I disagree with you: I am sure you're mistaken.
I stick to my opinion.
Let's agree to differ!

(5) When you want to say the "opposite" of what someone else said:

on the contrary! Quite the contrary! Just the opposite!
That is the very opposite of what I said.
That is quite the contrary to what I said.
I maintain the contrary.
In contrast to what you said, I maintain that.....

(6) When you are "quite sure" of something:

of course!
That goes without saying
It goes without saying that
I contend/maintain that.....
It's my conviction that.....

(7) When you want to "ask a question":

May I interrupt you?
There arises the question/point whether/if
This question raises the whole issue

(8) When you "haven't understood":

I beg your pardon. / Pardon?
Could you repeat what you've just said? But slower, please./
Could you slow down a bit?

(9) If you should want to "correct a mistake":

Excuse me (for interrupting) you should have said: "....."

(10) When you want to distinguish one aspect from the other:

on the one hand – on the other hand

in general – in particular

generally speaking

on the whole

taken as a whole

at first sight – on second thoughts

(11) When you want to "add" something:

In addition

Moreover

Furthermore

Finally

(12) When you want to "emphasize" something:

I would like to lay (put) emphasis (stress) on the fact that..

I just want to point out that

(13) When you want to "say the truth":

To be frank (with you)

Frankly (speaking)

To say the truth

(14) And if you are "not sure":

I don't know exactly.

I don't know for certain.

(A) General phrases:

in other words in this respect

to a certain degree/extent It depends on your point of view

in brief/short

To be brief

To cut a long story short,.....

Let me put it this

way:.....

I don't know. – I don't know either. Nor/Neither do I.

Retrieved from <http://www.scribd.com/doc/17655885/Useful-Debate-Vocabulary>
[http://lehrerfortbildung-bw.de/faecher/englisch/gym/fb1/binnendiff/2 ue mat/mat14/](http://lehrerfortbildung-bw.de/faecher/englisch/gym/fb1/binnendiff/2_ue_mat/mat14/)

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 7

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts.

By the end of the lesson students should be able to:

- Use debate techniques to convey meaning effectively, persuade, argue for or against a point
- Identify the value of team work
- Critically analyze and reflect on information related to copper mining
- Apply linguistic and non-linguistic strategies to convey meaning effectively
- Identify the ways and the value of the concepts “reduce, reuse and recycle”
- Identify target vocabulary from the video
- Recognize the current situation on waste management in Armenia

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up: Preparation for the simulation game	10 min	<ul style="list-style-type: none"> • T greets Ss • T asks Ss to read the debate guidelines and points in the grading rubric again on the PPT slide • T gives handouts with debate structure (discussed during previous class) to each group (Appendix 1) • T gives groups some time to discuss and get prepared 	T – S S – S <ul style="list-style-type: none"> • To announce the start of the lesson • To remind Ss about criteria by which they will be assessed • To give Ss opportunity to wrap up and discuss their ideas before the debate

2. Simulation game: Public hearings	40 min	<ul style="list-style-type: none"> • When all the groups are ready, T announces the start of the debate “A New Copper Mine in the Syunik Region of Armenia: To Be or Not to Be” • T tells Ss she will be the chairperson during the debate and will be responsible for strictly keeping the time and ensuring Ss act within the format of the debate. • The role-play goes on based on the debate structure with which Ss are already familiar • T makes notes to be able to provide feedback later 	T – S S – S	<ul style="list-style-type: none"> • To help Ss gain a deeper knowledge of the topic • To develop Ss’ critical thinking skills • To help Ss identify the value of team-work • To help Ss use effective linguistic and discourse strategies for conveying meaning • To help Ss use related vocabulary for persuading, arguing for or against a point in oral form.
3. Feedback session	10 min	<ul style="list-style-type: none"> • Before giving feedback herself, T asks Ss to try to reflect orally on what went well and what went wrong during the debate • T asks Ss to look at the points in the grading rubric and tell which were followed and which weren’t • Then T gives feedback herself based on her observations 	T – S S – S	<ul style="list-style-type: none"> • To help Ss identify their strengths and weaknesses in debating • To promote the ideas of peer feedback and self-assessment
4. Signing up for presentations	5 min.	<ul style="list-style-type: none"> • Before passing to the new topic, T distributes sheets to the Ss and asks them to write the topics of their upcoming presentations if they have decided on them (Appendix 2) • T reminds Ss that the presentations are going to be individual projects • T asks those Ss who haven’t decided on a topic yet, to do so and inform her either via e-mail or during next class at the latest. 	T – S	<ul style="list-style-type: none"> • To remind Ss they have to start working on their presentations • To ensure that Ss will present on different topics

5. Brainstorming on a new topic	10 min	<ul style="list-style-type: none"> • T shows the phrase “waste management” on a PPT slide and asks Ss how they understand it. T asks Ss if they know how waste is treated in Armenia and what problems it has. • Then T shows the international recycling symbol and asks Ss what it represents (Appendix 3) • After that, T shows the same symbol with the words reduce, reuse, recycle and asks Ss what they mean and how they differ from each other • Then T provides definitions of the terms for Ss to check their ideas (Appendix 4). 	T- S S – S	<ul style="list-style-type: none"> • To help Ss identify the current state and the problems waste management system faces in Armenia • To prepare Ss for the discussion and upcoming video on recycling • To help Ss understand the concept of “reduce, reuse, recycle”.
6. Pre-watching activity: Vocabulary	6 min	<ul style="list-style-type: none"> • T shows words on PPT slides and situations in which they are used (Appendix 5) • T asks Ss to guess the meaning of the words 	T – S	<ul style="list-style-type: none"> • To introduce potentially challenging vocabulary items to Ss before watching the video • To enrich Ss’ vocabulary
7. Watching the documentary film	11 min	<ul style="list-style-type: none"> • T tells Ss they are going to watch the documentary “How Waste Recycling Helps Our Planet: Zero to Landfill” http://www.youtube.com/watch?v=e2Ffs5gMk4g • Ss watch the 11-minute long documentary film 	T – S	<ul style="list-style-type: none"> • To get acquainted with best practices in recycling • To make Ss responsible citizens of their country
8. Post-watching activity: Discussion	8 min	<ul style="list-style-type: none"> • T poses some questions for a discussion like: <ol style="list-style-type: none"> 1) Why is recycling so important? 2) What do you think about the factory? 3) What can you do to bring a change? • T and Ss discuss the questions 	T – S S – S	<ul style="list-style-type: none"> • To give Ss the opportunity to reflect critically on the video • To help Ss practice expressing their opinion in oral form

9. Reading activity	8 min	<ul style="list-style-type: none"> • T distributes handouts to Ss and tells them they are going to read about a recycling project in Armenia (Appendix 6) • T asks Ss to read the text in pairs and underline important information as they are going to discuss it. 	T – S	<ul style="list-style-type: none"> • To link the topic to the Armenian context • To help Ss become aware of the current situation in Armenia regarding recycling
10. Post-reading activity: Discussion	8 min	<ul style="list-style-type: none"> • T and Ss discuss the reading by paying special attention to the supposed positive results of such a program 	T – S S – S	<ul style="list-style-type: none"> • To help Ss reflect critically on the text
11. Homework	4 min	<ul style="list-style-type: none"> • T asks Ss to write a reflection on class discussion • T reminds Ss to think of the topics for their presentations and send them to her via e-mail. 	T – S	

Structure for the Mining Debate

STAGE 1: Total Time Allowance: 15 minutes		
"Pro" (MC) Point #1	"Con" (EA) Objection to Point #1	"Pro" (MC) Rebuttal to Point #1
"Pro" (MC) Point #2	"Con" (EA) Objection to Point #2	"Pro" (MC) Rebuttal to Point #2
"Pro" (MC) Point #3	"Con" (EA) Objection to Point #3	"Pro" (MC) Rebuttal to Point #3
Total Time Allowance: 5 minutes		
Questions or comments from the Government		
Questions or comments from the villagers		

STAGE 2: Total Time Allowance: 15 minutes		
"Con" (EA) Point #1	"Pro" (MC) Objection to Point #1	"Con" (EA) Rebuttal to Point #1
"Con" (EA) Point #2	"Pro" (MC) Objection to Point #2	"Con" (EA) Rebuttal to Point #2
"Con" (EA) Point #3	"Pro" (MC) Objection to Point #3	"Con" (EA) Rebuttal to Point #3
Total Time Allowance: 5 minutes		
Questions or comments from the Government		
Questions or comments from the villagers		

STAGE 3: Total Time Allowance: 5 minutes

8. "Pro" (MC) Concluding Remarks
9. "Con" (EA) Concluding Remarks
10. Villagers – Concluding Remarks

GOVERNMENT DECISION

(5 min)

Adapted from informationliteracywactc.pbworks.com/f/Debate_Etiquette_1_.doc



Retrived from <http://www.obrfc.com/obrfc-goes-green>



<http://louisdietvorst.wordpress.com/2012/05/11/we-need-to-break-the-reduce-reuse-recycle-loop-and-replace-it-with-a-reuse-recycle-renew-loop/>

“Recycling is a process to change waste materials into new products to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, reduce energy usage, reduce air pollution (from incineration) and water pollution (from landfilling).”

Reuse is using an item again after it has been used. This includes conventional reuse where the item is used again for the same function, and new-life reuse where it is used for a different function.

Recycling is the breaking down of the used item into raw materials which are used to make new items.

Adapted from: <http://en.wikipedia.org/wiki/Recycling>

Landfill

Many people suspect that lorry-loads of stuff collected for recycling end up in landfill instead.

Litter

Litter also destroys the beauty of parks and beaches, making people avoid these areas.

Rot

Rain has also been getting in through holes, causing the floors and walls to *rot*.

Decompose

Look how long it takes a tree to *decompose* lying on the ground.

Choke

As you know, one never gives chicken bones to a dog because they splinter and will *choke* the animal.

Sorting

Once the materials are taken to the *sorting* facility, everything is dumped onto conveyers—hundreds of them.

Sentences retrieved from <http://www.reference.com/example-sentences>

UNDP AND PARTNERS TO INCREASE RECYCLING IN ARMENIA

According to estimates, plastic containers, bottles and bags are one of the main pollutants of water sources in Armenia. The volumes of plastic packaging and bottles are growing rapidly with increasing consumption of water, soft drinks, cooking oils, dairy and other products delivered in such bottles and other forms of packaging. Currently about 5,000 tons of polyethylene terephthalate (PET) bottles per year are disposed of in Armenia and, with no pollution prevention and recycling systems in place, these pollutants are discharged directly into the rivers.

To address this challenge, a new public-private partnership project was initiated by UNDP and USAID with Eco-Engineering Company, one of the first private recycling initiatives in Armenia, with the purpose to improve solid waste management in the country. The partnership will support the implementation of an efficient and economically viable PET recycling program in Armenia and, in the long-term, improve access to clean, safe and reliable water. The project aims to reach the level of 70 percent collection of PET in Armenia, or 3,500 tons of PET per year.



While the overall objective of this project is to reduce pollution by supporting development of PET management system in Armenia from collection to recycling, the project will also create the conditions for the private sector to invest in the high value-add recycling business. These goals will be achieved through simultaneous implementation of the following synchronized project components:

- Creation of adequate conditions and technical/infrastructural capacities in the project areas for differentiated treatment of waste, namely for separation of PET bottles and relevant plastic products immediately at the first stage of the waste collection cycle.
- Design and put into operation a model for public private partnership for collecting and processing of the PET bottles from the first stage of waste collection cycle.
- Support the selected private companies in establishing a high profile and higher-value added recycling of PET, providing technical and high level advisory/expert services.

- Organize an effective public awareness campaign and support public participation in PET collection programs, including those along water sources and protected areas.

The above mentioned public awareness campaign will include activities such as TV and radio programs, rallies by volunteers and dissemination of information. Further development of the project will take place through intensive discussions with stakeholder, beneficiaries and experts.

As the implementing partner, UNDP is fully responsible for management and implementation of the project. Among other tasks, UNDP will invest up to US\$90,000 for project implementation, organizing the procurement and handover of special recycling bins to the municipalities, basin authorities, national parks authorities and provide technical support.

Acting as the main donor of the project, USAID granted US\$450,000 to UNDP for implementing the project. A private partner, Eco-Engineering, will sign contracts with small processing companies and buy the whole volume of the collected/processed PET supplied at a fixed price, provide technical/advisory support to the processing companies for improving the quality of supplied PET and provide up to US\$1.5 million (conditional upon collecting 3,5000t. of PET) for the establishment of large scale recycling/production facilities.

Specifically the following results are expected:

- Improved recycling operations through installation of upgraded equipment and implementation of innovative technology;
 - Improved collection system resulting in increased volume (3500 tons/year) and reduced transportation costs;
 - Reduced pollution of targeted water sources and improved watershed management practices in protected areas;
 - Increased level of public awareness and participation in pollution reduction and clean-up campaigns;
 - Strengthened waste collection functions of communities, municipalities and water basin organizations
6. Creation of additional income generating opportunities for the local low-income population in the project areas.
- Creation of additional jobs (up to 100 according to estimates).

Adapted from <http://business.un.org/en/documents/9332>

LESSON PLAN
Exploring the Environment through Video
LESSON 8

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides, handouts.

By the end of the lesson students should be able to:

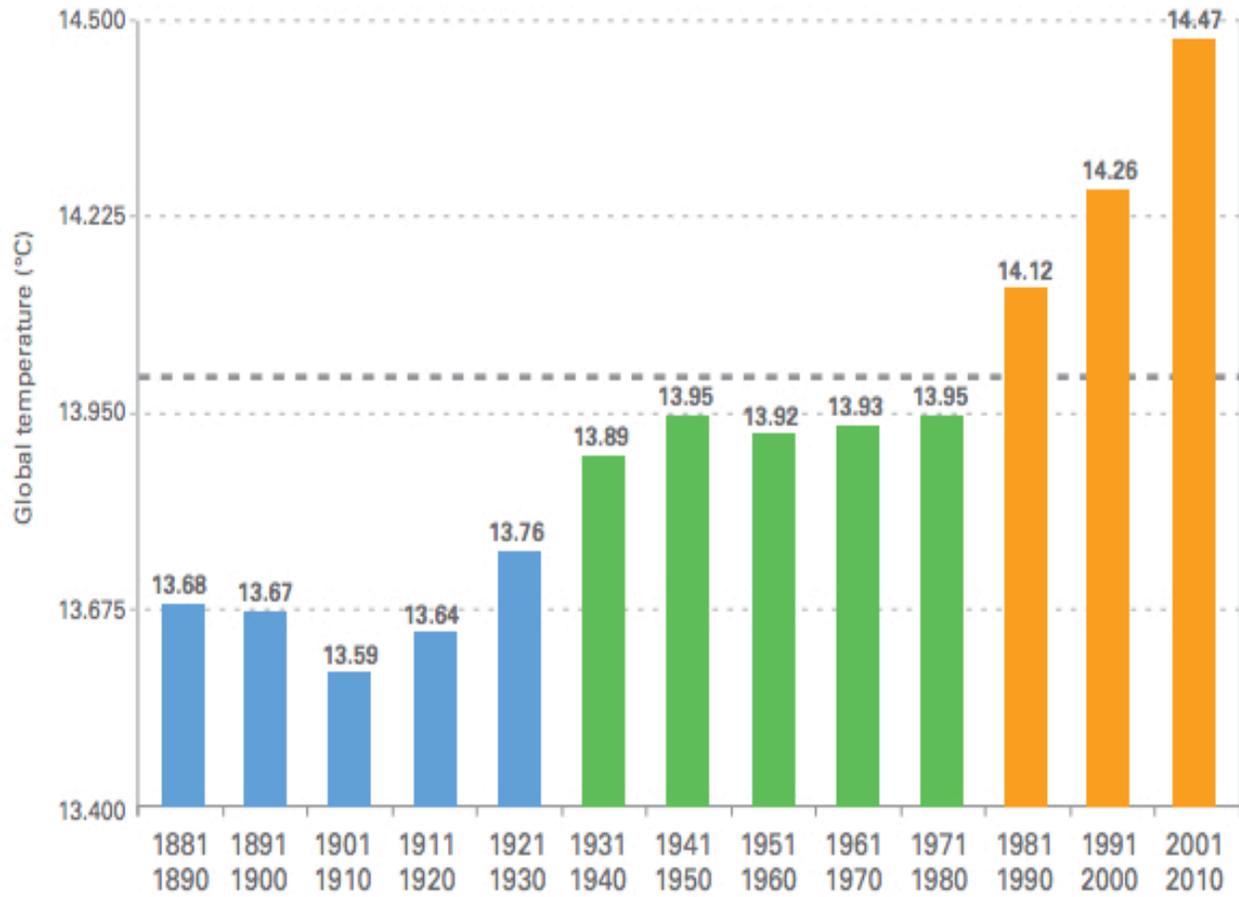
- Recognize the main cause of global warming
- Identify and discuss solutions for the climate crisis
- Recognize the term environmental sustainability and discuss ways to achieve it
- Use the skimming strategy for reading and listening for general idea
- Critically analyze and discuss information from the reading and from the videos
- Identify effective verbal and non-verbal strategies in speaking

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up	5 min	<ul style="list-style-type: none"> • T greets Ss • T asks Ss if they have written their reflections 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson
2. Pre-reading activity: Brainstorming	15 min	<ul style="list-style-type: none"> • T asks Ss what global warming is • Then T shows the definition on a slide • T asks Ss if they can guess how much the average world temperature has increased since the early 20th century • T shows a graph showing rates of temperature increase since 1881 on a PPT slide (Appendix 1). T asks Ss what they can understand from the graph • T asks Ss what they think is the main cause of increasing rates of 	T – S S – S <ul style="list-style-type: none"> • To remind Ss about the phenomenon • To help Ss have clearer idea of the rates of increase and causes • To prepare Ss for the subsequent reading and the video

		<p>global warming</p> <ul style="list-style-type: none"> As there is a supposition that global warming is largely caused by volcanoes, T shows some figures that show that it is a wrong assumption on PPT slides (Appendix 2) 		
3. Reading activity	5 min	<ul style="list-style-type: none"> T distributes handouts with a text on the existence of a consensus on the main cause of global warming (Appendix 2) T asks Ss to work in pairs and quickly look through the text to find out what is the dominating view on the causes of the phenomenon 	T – S S – S	<ul style="list-style-type: none"> To help Ss get acquainted with what science says To help Ss realize that their claims should be based on facts or research To help Ss practice the skimming strategy for getting a general idea of the text
4. Post-reading activity	5 min.	<ul style="list-style-type: none"> T and Ss discuss the reading T asks Ss how the reading changed their perception of the phenomenon 	T – S S – S	<ul style="list-style-type: none"> To help Ss critically analyze the reading
5. Pre-watching activity	4 min	<ul style="list-style-type: none"> T asks Ss if they know what a TED talk is T tells Ss they are going to watch a TED talk by a person named Al Gore T asks Ss whether they know who Al Gore is Then T shows his short biography on a PPT slide and asks one of the Ss to read it aloud (Appendix 3) 	T- S S – S	<ul style="list-style-type: none"> To introduce the format of TED talks to Ss To give background information about the speaker To prepare Ss for watching the video
6. Watching the TED talk	22 min	<ul style="list-style-type: none"> T distributes comprehension questions to Ss and asks them to watch the video by paying attention to the questions and making notes for each question (Appendix 4). T also asks Ss to pay attention on the speaking and presentation strategies the speaker applies to 	T – S	<ul style="list-style-type: none"> To help Ss get a clearer idea of global warming and how to deal with it To promote the idea of global citizenship and collective

		<p>convey his meaning effectively</p> <ul style="list-style-type: none"> Ss watch the TED talk http://www.ted.com/talks/al_gore_s_new_thinking_on_the_climate_crisis 		<p>responsibility</p> <ul style="list-style-type: none"> To prepare Ss for their presentations for next class
7. Post-reading activity: Stage 1	10 min	<ul style="list-style-type: none"> T asks Ss to take two minutes and discuss the comprehension questions with their pair Then T and Ss discuss the questions in a whole-class discussion T asks Ss what effective speaking strategies they noticed in the speaker's speech 	T – S S – S	<ul style="list-style-type: none"> To help Ss understand the video better To give Ss the opportunity to reflect critically on the video
8. Post-watching activity: Stage 2	4 min	<ul style="list-style-type: none"> T asks Ss if the appeal by Al Gore reminds them of the term ‘global citizenship’. T asks Ss if they remember what the term implies. 	T – S S – S	<ul style="list-style-type: none"> To reintroduce the concept of global citizenship to Ss To relate the term to some action steps offered by the speaker
9. Brainstorming	7 min	<ul style="list-style-type: none"> T shows the term environmental sustainability on a PPT slide and asks Ss what they think it is T shows a short animation video explaining the term http://www.youtube.com/watch?v=B5NiTN0chj0 T asks Ss how they can define sustainability after watching the video T shows a definition on a PPT slide 	T – S S – S	<ul style="list-style-type: none"> To introduce the term sustainability to the Ss
10. Pre-watching activity	3 min	<ul style="list-style-type: none"> T asks Ss if they have any ideas related to what can be done for sustainable development 	T – S S – S	<ul style="list-style-type: none"> To help Ss share ideas on the topic
11. Watching a video	5 min	<ul style="list-style-type: none"> T tells Ss they are going to watch a video about current ways of sustainable development Ss watch the video and make notes http://www.youtube.com/watch?v=Gahs_Ew0oMU 	T – S	<ul style="list-style-type: none"> To enhance Ss’ knowledge about various ways of ensuring sustainable development To develop Ss’ note-taking skills

12. Post-watching activity	15 min	<ul style="list-style-type: none"> • T asks Ss what are some of the solutions offered in the video • T asks Ss what renewable and non-renewable sources of energy are • T and Ss discuss what fossil fuels are and how they differ from biofuel • T shows a picture on a PPT slide describing how geothermal energy is received and asks Ss to explain what they see on the picture (Appendix 5) • T asks Ss to work in small groups and write what people can do on the local level. • Then T shows pictures of energy-saving light bulbs and electric cars and hybrid cars, as well as a picture showing the difference between gasoline using and electric cars (Appendix 6). T asks Ss what they think about it. • T asks Ss what the main problem of having electric cars in Armenia is (absence of charging stations) 	T – S S – S	<ul style="list-style-type: none"> • To help Ss critically analyze information from the video • To enhance Ss' speaking skills • To enhance Ss' knowledge of renewable and environmentally safe sources of energy • To call for individual action
13. Preparation for presentations	15 min	<ul style="list-style-type: none"> • T distributes sheets of paper to Ss and asks them to write the topics of their presentations on them • T asks those who haven't decided on a topic to do so and let her know about it within 3 days • T shows the grading rubric for the presentation (Appendix 7) • T and Ss go through each point of the grading rubric 	T – S S – S	<ul style="list-style-type: none"> • To ensure there aren't many recurring topics • To make the criteria for assessment clear • To raise Ss' awareness about tips for effective presentations
11.Homework	5 min	<ul style="list-style-type: none"> • T asks Ss to write a reflection on class discussion • T tells Ss she will open a Google doc where they will be able to write the topics of their presentations 	T – S	



Retrieved from:

<http://irregulartimes.com/2013/07/05/has-global-warming-slowed-down-not-according-to-the-facts/>

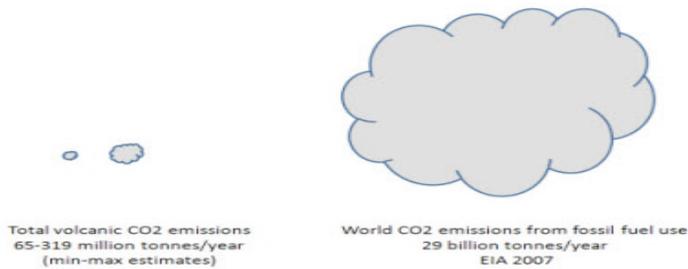
Globally, volcanoes on land and under the sea release a total of about 200 million tons of CO₂ annually.

The global fossil fuel CO₂ emissions for 2003 tipped the scales at 26.8 billion tons.

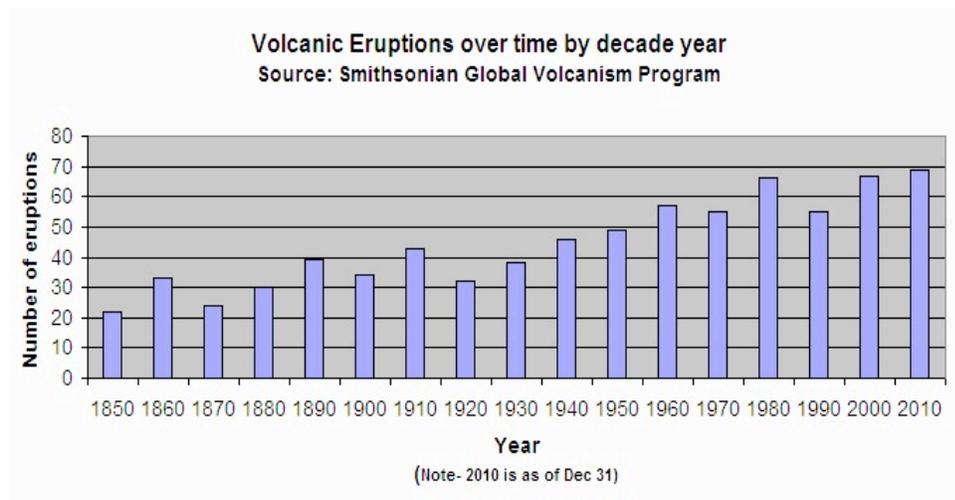
Volcanic CO₂ actually comprises less than 1 percent of that value.

Adapted from http://hvo.wr.usgs.gov/volcanowatch/archive/2007/07_02_15.html

The burning of fossil fuels and changes in land use results in the emission into the atmosphere of approximately 30 billion tons of carbon dioxide per year worldwide, according to the EIA. The fossil fuels emissions numbers are about 100 times bigger than even the maximum estimated volcanic CO₂ fluxes.



Retrieved from <http://www.skepticalscience.com/volcanoes-and-global-warming.htm>



Retrieved from http://the-end-time.blogspot.com/2010_05_01_archive.html

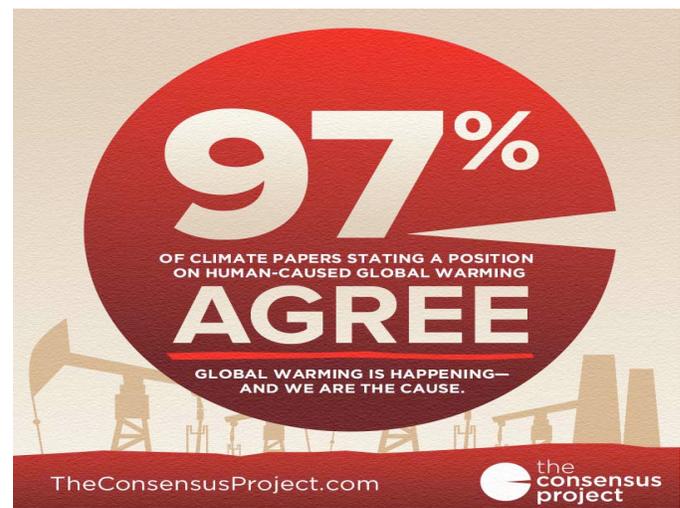
Is there a scientific consensus on global warming?

What the science says...

That humans are causing global warming is the position of the Academies of Science of many countries, as well as of 95% of active climate researchers who actively publish climate papers.

Skeptical Science's 2013 'The Consensus Project'

Scientists need to back up their opinions with research and data that survive the peer-review process. A [Skeptical Science peer-reviewed survey](#) of all (over 12,000) peer-reviewed abstracts on the subject 'global climate change' and 'global warming' published between 1991 and 2011 ([Cook et al. 2013](#)) found that over 97% of the papers taking a position on the subject agreed with the consensus position that humans are causing global warming. In a second phase of the project, the scientist authors were e-mailed and rated over 2,000 of their own papers. Once again, over 97% of the papers taking a position on the cause of global warming agreed that humans are causing it.



Oreskes 2004 and Peiser

A survey of all peer-reviewed abstracts on the subject 'global climate change' published between 1993 and 2003 shows that [not a single paper rejected the consensus position that global warming is man caused](#) ([Oreskes 2004](#)). 75% of the papers agreed with the consensus position while 25% made no comment either way (focused on methods or paleoclimate analysis).

Benny Peiser, a climate contrarian, [repeated Oreskes' survey](#) and claimed to have found 34 peer reviewed studies rejecting the consensus. However, an inspection of each of the [34 studies](#) reveals most of them don't reject the consensus at all. The remaining articles in Peiser's list are editorials or letters, not peer-reviewed studies. Peiser has since [retracted his criticism of Oreskes survey](#).

"Only a few abstracts explicitly reject or doubt the AGW (manmade global warming) consensus.

Anderegg 2010

This overwhelming consensus among climate experts is confirmed by an independent study that surveys all climate scientists who have publicly signed declarations supporting or rejecting the consensus. They found that 97% - 98% of climate experts support the consensus. Moreover, they examined the number of publications by each scientist as a measure of expertise in climate science. They found that the average number of publications by unconvinced scientists is around half the number by scientists convinced by the evidence.

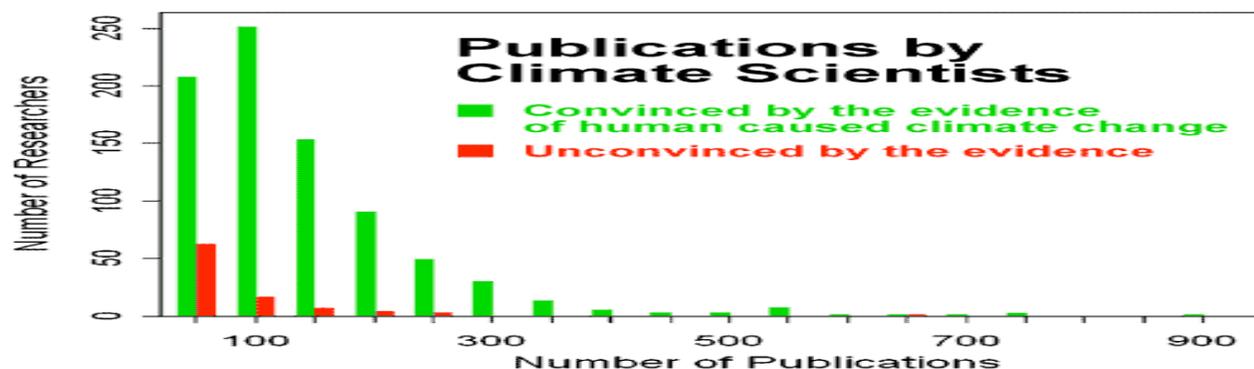


Figure 2: Distribution of the number of researchers convinced by the evidence of manmade climate change and unconvinced by the evidence with a given number of total climate publications.

Vision Prize

The [Vision Prize](#) is an online poll of scientists about climate risk.

Approximately 90% of the expert participants responded that human activity has had a primary influence over global temperatures over the past 250 years, with the other 10% answering that it has been a secondary cause, and none answering either that humans have had no influence or that temperatures have not increased.

Adapted from <https://www.skepticalscience.com/global-warming-scientific-consensus-intermediate.htm>

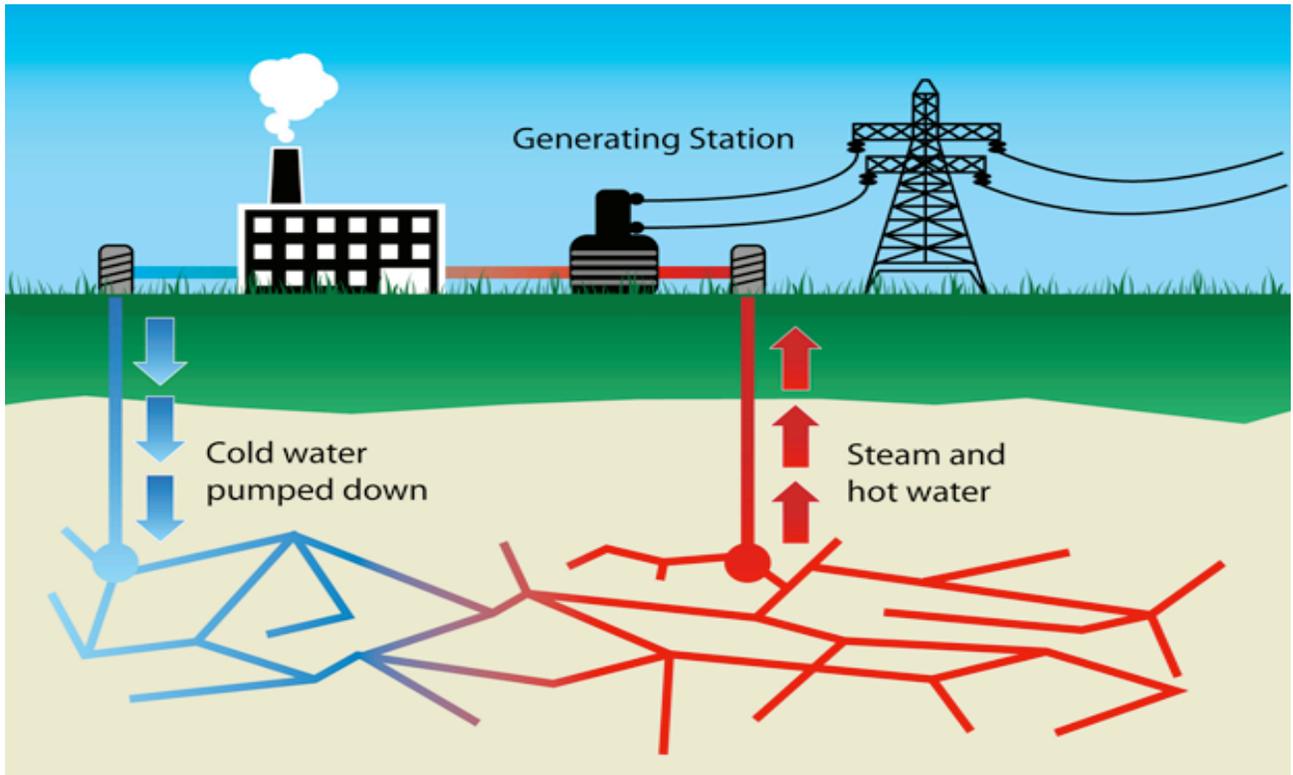


Albert Arnold “Al” Gore, Jr. (born March 31, 1948) is an American politician, advocate and philanthropist, who served as the 45th Vice President of the United States (1993–2001), under President Bill Clinton. He was the Democratic Party’s nominee for President and lost the 2000 U.S. presidential election despite winning the popular vote. Gore is currently an author and environmental activist. He has founded a number of non-profit organizations, including the Alliance for Climate Protection, and has received a Nobel Peace Prize for his work in climate change activism.

Adapted from http://en.wikipedia.org/wiki/Al_Gore

Al Gore: New thinking on the climate crisis |TED Talk

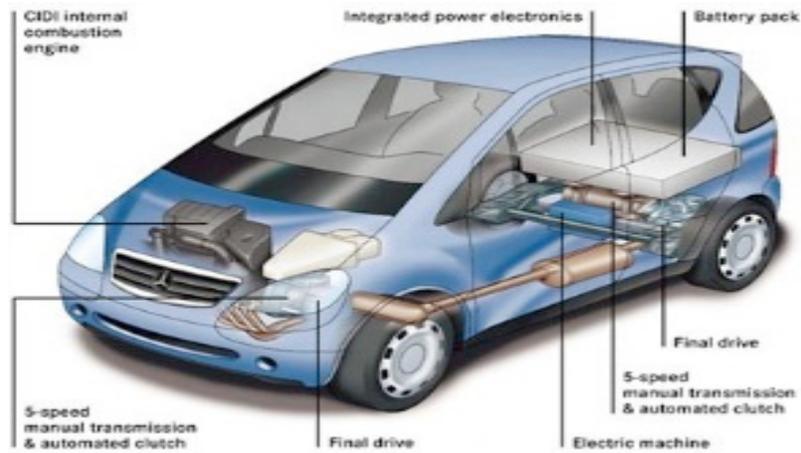
1. What does the speaker mean by “Religion is not about belief, it’s about behavior”.
2. What is the main point of the talk?
3. What does the speaker talk about the polar ice cap?
4. What is the difference between Earth and Venus based on the speaker’s description?
5. How many percent of Americans believe that human activity is responsible for global warming?
6. What can we do on the local, regional and global levels according to Al Gore?
7. What ways does the speaker offer for passing to a low carbon politics?
8. Where should investments be made
9. What does the speaker mean by “generational mission” or “hero generation”?



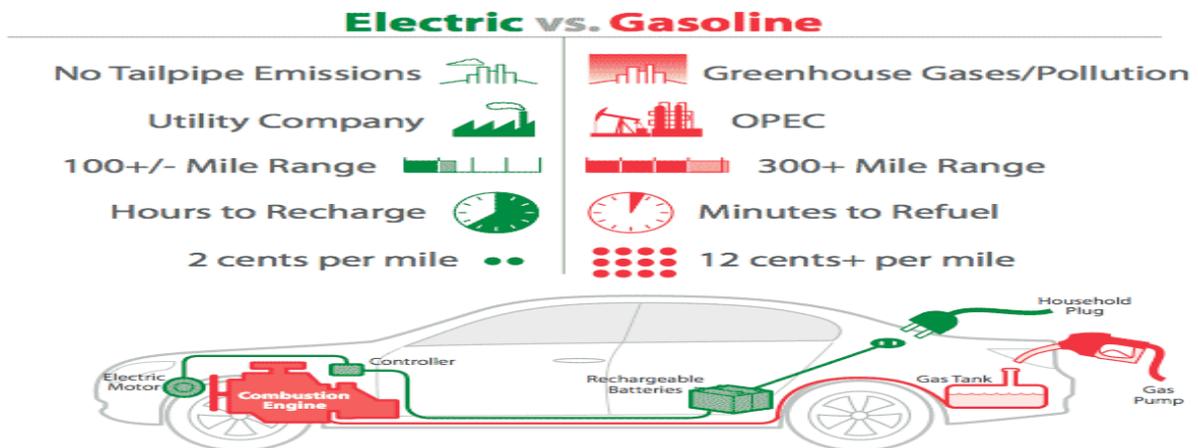
Retrieved from <http://www.carbonneutral.com/carbon-offsets/geothermal-energy>



Retrieved from <http://acceleratechiropractic.com/chiropractic/energy-saving-light-bulb-spiral-light-bulb-of-death/>



Retrieved from <http://auto.howstuffworks.com/fuel-efficiency/vehicles/question262.htm>



Retrieved from <http://www.plugin cars.com/electric-car>

GRADING RUBRIC FOR PRESENTATIONS

REQUIREMENTS	POINTS
Introduced topic effectively	2
Tried to make the presentation interactive	2
Maintained eye contact with listeners in all parts of the room	1
Spoke loudly and clearly	2
Slides did not contain too much text. Material was presented, not read	2
All the main points were highlighted. Topic was developed with sufficient reasons, examples and details	3
Used reasonably accurate grammar and vocabulary	2
Organized ideas logically, made clear transitions	2
Responded appropriately to questions	2
Concluded presentation effectively	2
TOTAL: 20 POINTS	

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 9

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides.

By the end of the lesson students should be able to:

- Recognize current environment-related issues
- Use effective presentation and reporting skills in speaking
- Apply related linguistic and non-linguistic means and strategies to convey meaning effectively
- Critically analyze and reflect on information from the peers’ presentations
- Identify skills of editing video

Procedure				
Stages/ Procedure	Time	Activities and Interaction		Purpose of the Activities
1. Warm up	2 min	<ul style="list-style-type: none"> • T greets Ss • T asks Ss if they have any questions before proceeding to student presentations 	T – S	<ul style="list-style-type: none"> • To announce the start of the lesson • To clarify all issues before presentations
2. Preparation for presentations	5 min	<ul style="list-style-type: none"> • T and Ss go through all the points of the grading rubric for presentations again (Appendix 1) • T reminds Ss they are going to have maximum 10 minutes for their presentations. T explains that Ss will present for 6-7 minutes. The remaining 3-4 	T – S S – S	<ul style="list-style-type: none"> • To make the timeframe and format of the presentations clear to Ss

		<p>minutes will be reserved for questions or comments by the teacher or by the peers</p> <ul style="list-style-type: none"> • T tells Ss they will be presenting according to the T's list of names in order to avoid confusion. T also tells that changes can be made if necessary 		
3. Individual student presentations	95 min	<ul style="list-style-type: none"> • Students do presentations on different environmental topics agreed beforehand with the T • T makes notes for grading Ss and giving feedback later • After each presentation T asks peers if they have questions or comments. T encourages peers to be active • Then T asks questions or makes comments 	T – S S – S	<ul style="list-style-type: none"> • To help Ss develop deeper knowledge on a particular environmental topic • To help Ss learn from each other through different presentation topics • To help Ss use linguistic and non-linguistic means to convey meaning effectively
4. Feedback session	10 min	<ul style="list-style-type: none"> • T asks Ss how everything went in their opinion and whether they have any particular comments • T shares her own impression about the presentations • T gives general feedback on content, as well as on recurring vocabulary and grammar errors without mentioning names 	T – S S – S	<ul style="list-style-type: none"> • To help Ss understand the value of peer feedback • To help Ss learn by giving constructive feedback
5. Video production workshop: editing stage	10 min	<ul style="list-style-type: none"> • The group responsible for preparing a workshop about the editing stage of video production presents the materials they have prepared • T helps them during the workshop • A short question-and- answer session follows 	T – S S – S	<ul style="list-style-type: none"> • To help Ss practice collaborative learning • To help Ss gain more skills in editing a video

		<ul style="list-style-type: none"> • T gives feedback • T and Ss discuss the grading rubric for video-production projects (Appendix 2) 		
6. Homework	2 min	<ul style="list-style-type: none"> • T asks Ss to write reflections on today's class • T reminds Ss they are going to present the video production group projects during next and the last class. T asks Ss to contact her and schedule individual conferences in case they need any support with video-editing or any other issue. 	T – S	

GRADING RUBRIC FOR PRESENTATIONS

REQUIREMENTS	POINTS
Introduced topic effectively	2
Tried to make the presentation interactive	2
Maintained eye contact with listeners in all parts of the room	1
Spoke loudly and clearly	2
Slides did not contain too much text. Material was presented, not read	2
All the main points were highlighted. Topic was developed with sufficient reasons, examples and details	3
Used reasonably accurate grammar and vocabulary	2
Organized ideas logically, made clear transitions	2
Responded appropriately to questions	2
Concluded presentation effectively	2
TOTAL: 20 POINTS	

GRADING RUBRIC FOR VIDEO PRODUCTION PROJECT

Performance Level	Needs Improvement	Satisfactory	Excellent
Group Collaboration	The work was not shared fairly. One or two students did all the assignment 0-1 points	All members contributed equally to the work, though there was some variation 2 points	All members had equal contribution to the project. 3 points
Storyboarding	Students did not make a storyboard or storyboard was not appropriate for the video. 0-1 points	Students made the storyboard on. However, some steps are not clearly explained. Storyboard fits the project 2-3 points	Students made the storyboard. Storyboard is detailed and fits the project 4 points
Content and organization	The video doesn't have a main topic, and logical sequence of content and ideas. Much of the information is not relevant to the topic 0-2 points	Information is related to a topic. Details are provided and information is mostly relevant in the video. 3-4 points	Video has a specific purpose. The topic is presented adequately with necessary supporting details 5 points
Spelling and punctuation	There are 5 or more grammar or spelling errors. 0-1	There are 2-3 grammar or spelling errors. 2 points	There are less than 2 grammar or spelling errors 3 points
Quality of the Video	The quality is poor. There is lack of transitions or overuse of them. There are no graphics. 0-2	There are sufficient transitions. The timing and pace is adequate. 3-4 points	Transitions are very effective. They help to convey the main idea. All the scenes in the video are relevant. 5 points
Total		20	

LESSON PLAN
Exploring Environmental Issues through Video
LESSON 10

Location – Experimental English Classes, American University of Armenia

Level of students – Pre-Information Level 3 (Intermediate)

Number of Students – 11

Age – 12-16

Duration – 120 minutes

Aids – Laptop, loud-speakers, board, PPT slides.

By the end of the lesson students should be able to:

- Critically analyze media
- Create videos for conveying a particular message
- Reflect critically on environmental issues in Armenia
- Use speaking skills and strategies to effectively convey meaning in oral form
- Evaluate the overall effectiveness of the course

Procedure			
Stages/ Procedure	Time	Activities and Interaction	Purpose of the Activities
1. Warm up	5 min	<ul style="list-style-type: none"> • T greets Ss • T asks Ss if they have any questions before proceeding to watching the student-made videos 	T – S <ul style="list-style-type: none"> • To announce the start of the lesson • To clarify all issues before presenting the projects
2. Presenting video production projects	25 min	<ul style="list-style-type: none"> • Ss present their video production projects done in small groups • Before watching each video one representative from the group gives some background knowledge about the video they have produced • After each video, T asks Ss to give their general opinion about the video and also provide an “expert” analysis and review of content and technical aspects of 	T – S S – S <ul style="list-style-type: none"> • To help Ss use another effective way of raising public awareness on an environmental issue • To help Ss use the skills for critically analyzing media • To help Ss become more media-literate. • To develop Ss’ self-

		<p>the video</p> <ul style="list-style-type: none"> • Then T gives feedback to the group 		<p>confidence and motivation</p>
3. Discussion	10 min	<ul style="list-style-type: none"> • T asks groups to think for some 5 minutes and share the experience they gained during the pre-production, shooting and editing processes. T asks Ss to think what difficulties they encountered, what they liked, what they didn't like. • Groups share their experience with the rest of the class 	<p>T – S S – S</p>	<ul style="list-style-type: none"> • To help Ss reflect critically on their experience • To find out the challenges the Ss faced and consider solutions to them in the long run
4. Role-play	20 min	<ul style="list-style-type: none"> • T divides Ss into three groups: <ul style="list-style-type: none"> ○ Government representatives ○ Members of social initiatives ○ Ordinary citizens • T asks each group to think of actions that can be carried out regarding environmental issues facing Armenia. T asks each group to think within the scope of its capacity and potentiality • T shows particular environmental problems that Ss should consider on PPT slides (Appendix 1) • Each group presents the results of their discussion • A whole class discussion takes place 	<p>T – S S – S</p>	<ul style="list-style-type: none"> • To help Ss go from identifying problems to thinking of solutions to them and taking action • To develop Ss' critical thinking skills • To develop Ss' sense of individual responsibility in ensuring sustainable development • To develop Ss' skills of delivering an oral message effectively
5. Post – questionnaire	25 min	<ul style="list-style-type: none"> • T tells Ss they are going to complete a questionnaire to see if they have gained any content knowledge during the course • T tells Ss that it is the same questionnaire they completed during the first lesson • T asks Ss to make the best effort in answering the questions as she is going to compare them with Ss' answers in the pre-questionnaire at the beginning of the course. 	<p>T – S</p>	<ul style="list-style-type: none"> • To check the current level of Ss' knowledge on the topics • To measure student achievement on content knowledge as compared to the beginning of the course

6. Focus group interviews with students	30 min	<ul style="list-style-type: none"> • T explains to Ss why she needs to take interviews from them and how the procedure is going to be • T asks Ss to be completely frank • T divides Ss into 3 groups • T conducts a 10-minute interview with each focus group to find out what worked well during the implementation of the course and what didn't work quite well • T thanks each group for agreeing to give the interview and tells them she will share the results of the course evaluation with them 	T – S S – S	<ul style="list-style-type: none"> • To evaluate the overall effectiveness of the course • To identify any gaps to be filled later on when offering the course • To make readjustments in the course to fit Ss' interests and preferences as much as possible
7. Wrap-up	5 min	<ul style="list-style-type: none"> • T thanks the group for taking the course and tells them that she hopes it was a meaningful experience for them 	T – S	<ul style="list-style-type: none"> • To help Ss realize that their work was appreciated

Environmental problems to focus on:

- Deforestation
- Loss of biodiversity
- Water pollution
- Soil intoxication
- Mining
- Waste management
- Littering

APPENDIX C: DESCRIPTION OF VIDEOS

Brief Description of the Documentary Films and the TED Talk Used During the Project

1. “The Magical Forest” – BBC Documentary 2012

Duration: 58:55 minutes

Source: <http://www.youtube.com/watch?v=khaYeIpmePo>

This documentary film looks at the incredible forest ecosystems that make life on Earth possible. Using amazing scenes taking place in the forest, Chris Packham demonstrates the connection between different organisms making up the forest ecosystems. These are intricate, incredibly clever and strange connections between the species, without which the forests simply would not exist.

2. The shrinking of the Aral Sea - "One of the Planet's Worst Environmental Disasters"

Duration: 19:06 minutes

Source: http://www.youtube.com/watch?v=dp_mlkJiwXg

The documentary film tells us the story of the shrinking of the Aral Sea which is considered one of the most terrible manmade environmental disasters. The fishing industry has disappeared, resulting in unemployment and economic collapse. The Aral Sea region is also polluted, causing serious health problems among the population living in the region. Local climate change is also considered one of the consequences of the drastic shrinking of the lake, with hotter summers and longer and more severe winters.

3. “Water: The Basics of Use, Pollution, and Our Health”

Duration: 5:35 minutes

Source: <http://www.youtube.com/watch?v=XMmpg35Bym0>

The short documentary explores how the Earth water is used, and its increasing importance. Everywhere we are polluting, diverting, and wasting our scarce resources of fresh water as population grows and technology advances. This is an urge for more efficient management of Earth’s fresh water resources on the local and state levels.

4. “Nauru – Island raiders”

Duration: 8:06 minutes

Source: <http://www.youtube.com/watch?v=8OB6xliWNmo>

This documentary film tells us about the consequences of irresponsible mining on Nauru Island. Several decades ago the residents of this small island nation were the second wealthiest people on earth. The country used to have natural wealth, in the form of organic phosphate. Because of merciless mining of phosphate, the residents of the island have been left with insufficient space to live and stone giants instead of the lush forests they used to have.

5. “Mining Is a Threat to Syunik”

Duration: 27:01 minutes

Source: <http://www.youtube.com/watch?v=QYkGXzUahyc>

This documentary on the damage caused by mining in Armenia was prepared by the AR TV station. It talks about the irresponsible copper and molybdenum mining in the Syunik region of Armenia. The ecologists alarm that no safety norms are kept in the factory and in the tailing dumps. This leads to water and air contamination which in their turn result in the loss of biodiversity and various diseases among people living in the region.

6. How waste recycling helps our planet - Zero to Landfill

Duration: 10:49 minutes

Source: <http://www.youtube.com/watch?v=e2Ffs5gMk4g>

This documentary film shows the importance of recycling in today's world. It demonstrates the recycling practice in Denvor, England. Waste is sorted in people's homes there. But there is also a factory that can sort and recycle unsorted waste. There are educational projects for children to gather litter near the seaside to make their neighborhood and their environment cleaner.

7. "Al Gore: New Thinking on the Climate Crisis" – TED Talk

Duration: 21:20 minutes

Source: <http://www.youtube.com/watch?v=rUO8bdrXghs>

Al Gore, the famous American politician and environmental activist, brings some evidence that the rate of climate change can be even quicker than the recent predictions have supposed, and warns us to take action with the feeling of "generational mission". He proposes some solutions both on the state and on the global level.

8. "Sustainable Development"

Duration: 4 minutes

Source: http://www.youtube.com/watch?v=Gahs_Ew0oMU

This mini-documentary introduces the concept of sustainable development. It offers several ways to ensure sustainable development. Namely, various sources of renewable energy are presented as a partial solution, as well as waste recycling.

APPENDIX D: QUESTIONNAIRE FORM

COURSE NAME: EXPLORING ENVIRONMENTAL ISSUES THROUGH VIDEO

PRE-QUESTIONNAIRE / POST -QUESTIONNAIRE

General Information

Name Surname:

Age:

Level:

Section 2

1. I know about the main environmental problems that our planet faces.

- Yes, mostly Some of them No, none of them

List those you are aware of:

2. I know how an ecosystem works.

- Yes, mostly A little bit No

Feel free to share your ideas:

3. I know why global warming is happening.

- Yes, mostly A little bit No

Feel free to share your ideas:

4. I know what consequences mining may bring to the environment.

- Yes, mostly A little bit No

Feel free to share your ideas:

5. I recognize the value of water resources and I know how to preserve them.

- Yes, mostly A little bit No

Feel free to share your ideas:

6. I am familiar with the problem of littering and its consequences.

- Yes, mostly A little bit No

Feel free to share your ideas:

7. I know how recycling is managed.

- Yes, mostly A little bit No

Feel free to share your ideas:

8. I am familiar with the activity of some organizations dealing with environmental issues.

- Yes A little bit No Not sure

Feel free to share your ideas:

Section 3

9. Do you care for the environment?

- Yes A little bit No

10. Do you litter (throw rubbish in the street, in the water)?

- Always Often Rarely Never

11. Do you get angry when you see people throwing rubbish in the street?

- Yes Sometimes No Not sure

12. Do you recycle (separate trash into different bins)?

- Always Often Rarely Never

13. Do you think recycling can help in solving ecological problems?

- Yes No Not sure

Feel free to share your ideas:

14. Have you participated in any of these kinds of events? Tick all that apply.

- Cleaning streets or yards from rubbish
- Educational campaign
- Walking or biking instead of driving
- Raising people's awareness about environmental issues
- Other (please specify)

15. Would you like to become a more active defender of the environment?

- Yes No Not sure

16. Do you think ordinary people can do something to save nature and the environment? How? Explain your opinion in 4-5 sentences.

A large, empty rectangular box with a thin black border, intended for the student to write their response to the question above. The box is currently blank.

APPENDIX E: INTERVIEW QUESTIONS

Interview Questions

1. What is your overall opinion about the course?
2. If you were given the right to choose, would you attend this course on a voluntary basis? Why?
3. Do you think this course was useful both for your language and content knowledge? How?
4. How did this course reshape your understanding of environmental issues and the level of their importance?
5. What do you think about the activities we did in class (video watching, discussions, jigsaw activities, debates, presentations)?
6. What do you think about writing reflections? Was it meaningful for you? Why?
7. What did you like most about the course?
8. What didn't you like about the course?
9. What would you change in this course? What would you do differently if you were the teacher?
10. Are you willing to become more active and take action after taking this course? Why? How?
11. You were often absent from class. What was the reason (applicable for 2 students only)? Was it lack of interest in the course?

APPENDIX F: TEACHER REFLECTIONS

Teacher Reflections

Teacher Reflection: Lesson 1

This class was an introduction to the course. Our first meeting went quite well. Students were given the opportunity to introduce their friends, give more information about themselves. The ice-breaker activity worked well.

I can say that I love my new students. I was pleasantly surprised to find out how smart today's generation is. Even the superficial discussion of basic environment-related terms was enough for me to see that students have enough understanding of major environmental issues. But the most relaxing finding for me was that their level of English proficiency is actually appropriate to take my course. I loved how they moved from discussing the environmental terms to debating about the reasons for some of them.

Fortunately, most of the students were familiar with blogging and seemed not to mind the idea of writing reflections in their blogs after each class. Only one of the students confessed he doesn't like blogging but will do his best.

In order to be able to assess students' current content knowledge and later compare it to the knowledge after taking the course, I gave students a pre-questionnaire. Then I introduced the course syllabus to the students. They seemed to be confused. I guess they are not used to detailed descriptions of assignments with grading rubrics. So, I decided that I had better talk about assignments and grading rubrics one or two classes before each assignment in order not to confuse the students.

Teacher Reflection: Lesson 2

Though students told me they had added environmental blogs and websites to their reading list, I had some doubts. So, I showed them how to do it to be on the safe side. I don't know if this will work or be somehow useful for them.

Today we discussed the first topic of our course – how forest ecosystems work. It is a fascinating topic. The reading and the documentary film half of which we watched today were just great. I observed the excited faces of students when they were watching the video. The discussion was also productive. Students were eager to check whether they have understood all the connections between the forest organisms described in the video. The only thing I didn't really like was that the boys participated more actively in the discussions compared to the girls. I think I should take this into account and pay special attention to girls' participation from now on.

We also practiced writing summaries of the reading text. I am happy we did it because I observed a lot of copy-pasting. So, I conducted a mini summary-writing workshop with the students.

I think this was an informative and exciting lesson for the students. I hope they will write insightful reflections on the class discussion.

Teacher Reflection: Lesson 3

Unfortunately, only three students had written reflections on previous class discussion. Students did not have any sound explanation for not writing them. So, I just asked to write reflections hereinafter as it is a good way for me to know what they like and what they don't. Out of the three students who had written reflections only one student knew how to write them. The other two had just written summaries. I had predicted this, and I had prepared a reflective writing guide which we read and discussed in class. We also looked at an example of a reflection for students to have better idea.

Today we watched the second half of the documentary on forest ecosystems. I feel students really like this documentary and they participated very actively during the discussion of the film. In general, students seem to like content-based discussions more than the skills-based ones (e.g. the reflective writing discussion).

Besides, students like whole class discussions more than small group discussions. In fact, I asked them what format they prefer. They unilaterally answered that they like whole class discussions of the video. So, maybe I will take this into account and will try to make a meaningful balance between whole class and small group discussions. I can also observe that small group discussions seem to be demotivating for students because they are eager to share their answers and impressions with the whole class. Maybe I will use group work for activities other than video discussions.

I am impatient to see whether students really understood how to write reflectively. We'll see during next class.

Teacher Reflection: Lesson 4

This time only four people had written their reflections. I suspect the problem is that one of my peers is conducting research with this group. She gives them blog writing and pencil-and-paper writing assignments twice a week. Probably it is too much for the students. However, the good thing is that those who wrote reflections finally understood what a reflection is and how to write it.

Today's discussion was related to the Aral Sea disaster and its comparison with the Sevan Lake. Students seemed to be interested in the video. But during the discussion I noticed they had difficulties answering the questions. They had not been as attentive as they had been during previous class.

Today I tried the jigsaw activity with a reading text on Lake Sevan. I had to give detailed instructions as this is a relatively complicated activity. It worked very well though I had to remind students they shouldn't just read their information to the other group.

We also had a discussion on fresh water use. Students were surprised to know that the world fresh water resources are so scarce. However, even after the discussion it seemed to me they weren't really ready to reduce their use of water at home. Well, at least the message was sent to them and they got it.

Teacher Reflection: Lesson 5

Today we started the class with the discussion of the most recurring grammar and vocabulary errors in reflections. It is a rare opportunity for me to focus on language. My experience with this course keeps showing me that it is difficult to pay enough attention to language. Content instruction comes somehow naturally, while language instruction needs deliberate "intervention".

Today's topic of discussion was mining. We watched a video about a small South Pacific island which is a victim of mining. Students watched how a paradise turned into hell due to irresponsible mining. In order for students to realize that every change brings to a chain reaction, we read about some additional problems the island faces. However impressive the video was, I noticed students felt it was not about them. Next class we are going to discuss mining in Armenia. I am looking forward to comparing student reactions to local environmental problems as compared to others' problems.

In order to tie today's discussion to local context, as well as boost students' creativity, I asked students to work in groups and prepare an environmental poster, a call for action on any environmental issue. Two out of three groups chose to speak out about a local environmental problem and solutions to it. I think this was today's most engaging activity.

Teacher Reflection: Lesson 6

Today before starting the class, I asked the students who do not write reflections to take a piece of paper and write the reason they fail to write their reflections. I told them to be frank because it is going to be anonymous. It may give insights on the nature of the problem.

This lesson was the logical continuation of the previous one. We discussed issues related to mining in Armenia. Before discussing copper and molybdenum mines in Armenia, I decided it would be useful for students to know what copper and molybdenum are used for, why they are so important. I chose the jigsaw activity for this purpose as the experience from previous classes shows it has been quite successful.

As we don't have an English translation of the film, we watched the documentary on mining in Syunik in the Armenian language with English subtitles. This is a very important and informative film. So, I couldn't help showing it to the students. Students had contrasting opinions about it. I like that students analyze information critically. Some of them stated that mining is important for Armenian economy. This was a wonderful opportunity for me to explain that we're not talking about banning mining. We are talking about responsible mining.

As during next class we are going to have a role-play debate (a simulation game) on mining, we also discussed some debate guidelines, as well as decided on the roles of students. Groups were given some time to think of several arguments in favor of the position of their group. I could already feel that the debate is going to be a hot one. Role plays always work well with teenagers because they take their roles very seriously.

I am looking forward to the debate. The topic is hot, the students are excited.

Teacher Reflection: Lesson 7

Today was our debate day. It was just great. I had four observers most of whom are my peers. As we had four absences, the observers volunteered to join the teams with insufficient number of members. Well, I can probably say that the debate was really a success. Students were totally immersed in their roles, especially the group presenting the mining company. We had absentees from the group representing environmental activists. My peers helped this group a lot in presenting their arguments. The only challenge during this role play was ensuring equal participation of all students. I did my best to encourage all the students to speak but I was not always successful. The main problem was with a couple of shy students who "hid" behind my peers. At the end, I gave positive feedback to all the students as overall they performed quite well. I also made some comments on the absence or inappropriate use of some linguistic and non-linguistic strategies students should have used. We had discussed these strategies and the

grading rubric during the previous class. I think this was a successful and motivating activity for my smart students.

The rest of our lesson was devoted to recycling. This was also a very productive discussion. Students seemed to be excited to learn about how recycling works, the current state of waste management in Armenia, ways in which they can be helpful to recycling companies. These students are really great. I am proud of them.

Teacher Reflection: Lesson 8

Today's discussion focused on global problems facing each country – global warming, energy crisis. As one of my students is a strong opponent of the hypothesis according to which global warming is caused by humans, we had quite a lively discussion on this topic. I did not impose any hypothesis on the students. I just distributed a reading to the students which showed that 97% of scientists agree that global warming is caused by men. I encouraged students to have their own opinion but always base it on facts or research. Even though I didn't agree with one of my students, I still encouraged him to express his opinion and asked other students to respect each other's points and always be open to new ideas.

We watched a great TED talk on global warming today. This had two objectives. First, students learned more about global climate change and possible solutions to it. Second, they listened to a great speaker who successfully used various means of conveying meaning effectively. So, this was kind of a preparation for student presentations for next class. We discussed the grading rubric for presentations separately. Grading rubrics show teacher's expectations from students and, at the same time, create certain expectations for students.

In general, this was a very productive class as we didn't only discuss the problem. Most importantly, we discussed solutions to the problems of global warming and energy crisis both on the state and on the local levels.

I think this course is helping students to reshape some of their perceptions of the environment they live in and their role in it.

Teacher Reflection: Lesson 9

Today I was once again convinced that my students are so smart. First of all, there was no topic that was repeated during student presentations. Some students had even gone beyond the scope of the topics we had discussed in class. I could feel that they had prepared their presentations and speech very carefully. Another thing that made me happy was that they had taken into consideration the points in the grading rubric and guidelines on effective presentations that we

had discussed during the previous classes. The only problem was that the first presentations were not very interactive. However, I noticed that the students who presented after took into account my comments on their peers' presentations. I also felt they liked to be given the idea to comment on each other's presentations.

I think we have already managed to create an affective atmosphere in the classroom where there are no carriers of knowledge and absorbers. All of us learn from each other. For instance, today I came to the class and told one of the students that I went to internet and found out that he was wrong about causes of global warming. At the same time, I had been wrong about the speed of electric cars. So, students understand that all of us can be wrong and we should constantly explore to find the right answer, and not be afraid of being wrong.

As I won't be able to pilot the last lesson, I also interviewed students to find out what worked well during the course and what needs to be improved. I did focus group interviews. At first I was afraid it wouldn't work. But now I think it was great as students built on each other's ideas. After the interviews I can say with great joy in my heart that the course seemed to be a success. Overall, it served its purpose.