

The Comparison of Two Different Text Processing Skills to Enhance EFL Reading Comprehension: Summarizing vs. Listing the Main Points

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Abstract

As a global skill, reading is a cognitive activity including both surface and deep processing on its core, and developing reading comprehension is an important aspect of EFL as it requires the use of macro-level processing based on schema activation. The present study investigated the efficiency of two different text processing skills of reading comprehension; namely, “summarizing” and “listing the main points in a text”. The main assumption was that as a depth processing skill, summary writing requires macro level processing steps including selection of the main ideas, understanding the logical connections among them, and spending more mental effort and more involvement while reading, which promotes better comprehension. The participants of the study were second-year Turkish EFL university students (N=50) from the same proficiency level at the Department of English Language Teaching. They were divided into two groups randomly and read an argumentative essay. The first group wrote a summary, while the other group made a list of the main points after reading the essay. Then, they were given the same multiple-choice and open-ended reading comprehension items in order to examine if there were any significant differences regarding their comprehension level. The findings revealed that summary writing condition really promoted the overall reading comprehension and success of the language learners better. The findings have certain implications for the fields of Language Education and Applied Linguistics, as they can guide EFL teachers in designing their reading comprehension activities.

Keywords: EFL Reading comprehension, text processing, language learning

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Introduction

Reading is one of the most important areas in foreign language learning process, and therefore there are many studies focusing on its occurrence, comprehension process, its assessment and ways to enhance its success. Mainly, reading can be seen as the combination of taking explicitly given information and deriving more global, abstract meanings from the text. In that sense, comprehension is the integration of these two processes. The main discussion behind the reading process is the relationship between process and product dimensions. Alderson (2000) claims that the process refers to the reading event that is the interaction between the readers and the text; and the reader not only looks at the text, but also decides how the ideas are related to each other in the organization of the text in the meaning-making process. Product component, on the other hand, refers to the condition where the reader combines the information in the text with his/her own experiences and background knowledge so that s/he can realize how the main assumption of the text is related to his/her own identity.

As reading is a complex process, researchers generally tend to explore its components or steps in order to explain the fluent reading process (Grabe, 1991; Linderholm et al., 2000). There are certain factors associated with reading comprehension, such as the reader, the text, prior knowledge-schemata theory, reading strategies and metacognitive awareness (Wixson and Peters, 1987). Texts are also important for the comprehension level as they have also certain features affecting the comprehension of the readers (Linderholm et al., 2000; Geiger and Millis, 2004). Besides, prior knowledge and metacognitive strategies play a crucial role in the reading comprehension process.

Prior knowledge that is directly related to reader's background knowledge about the content enhances his/her understanding in a positive manner. Kozminsky & Kozminsky (2001) claim that prior knowledge referring to whatever readers already know about events, ideas or object described in the texts influences the meaning that they construct from the text, and this is directly related to schema theory. Student with a good understanding of the text generally tend to combine the new information in the text with their own general knowledge called world knowledge in that sense. Apart from these, reading strategies are highly associated with reading comprehension as readers tend to use various strategies in the reading and meaning-making processes (Carrell, 1989). Lastly, metacognitive awareness is directly associated with reading comprehension, as readers who are aware of their own thinking and learning process become better readers and comprehend the texts in a better way (Guterman, 2002; Eilers and Pinkley, 2006). Therefore, metacognitive awareness guidance can be accepted as an effective and productive way to enhance reading comprehension and monitor it. Explicit instruction of metacognitive strategies is an effective instruction method as it promotes better comprehension, and also more independent text processing skills.

Text Processing Models

There are various models of reading indicated in literature. Especially, the bottom-up and top-down models of reading are highly stressed models as they reflect the reading process in surface and deep levels. Also called text-based, text-dependent or data-driven model, bottom-up model refers to fact that successful reading is a matter of

decoding the individual words in a text in order to derive a meaning (Ayari, 1998; Alderson, 2000). Top-down view, on the other hand, uses discursal and real-world knowledge to construct and interpret messages in the text. It is also called conceptually-driven, reader-based or knowledge-based. The reader who is at the heart of the reading process, uses his/her past experiences and important aspects in the text in order to get the meaning.

Schema is greatly emphasized in this model as the background knowledge allows the reader to create or reconstruct a meaning between his/her prior knowledge and new incoming information in the text. Apart from these two models, there is also interactive model referring to the combination of bottom-up and top-down processes, and it is the favorable method in instruction as these methods are both effective and useful to a certain extent. Ayari suggests that interactive model provides a more accurate conceptualization of the reading process as readers generally tend to benefit from both bottom-up and top-down procedures while reading a text. Grabe (1991) suggests that interactive approaches refer to two different conceptions and he gives different classifications. First of all, the interaction can be between the reader and the text so that the reader constructs the meaning in the text again through his/her own observations and experiences. Besides, this interaction can be between skills as high and low processing including automatic identification skills and interpretation skills in that sense.

There is a discrimination between reading the lines and reading between the lines referring to the fact that the reading process not only includes recognitions of the main ideas defined explicitly in the text (micro-level processing), but also the realization of the underlying meanings, literal components and the background understanding or assumptions of the writer (macro-level processing). Microlevel processing includes certain skills such as recognizing the script of the language, understanding explicitly stated information, understanding conceptual meaning, understanding relations within the sentence, distinguishing the main idea and the supporting details, skimming, scanning and interpreting the main ideas in the text. Macrolevel processing, on the other hand, is much more related to deeper levels and readers should be critical in their interpretations and meaning-making process (Lehto et al., 2001; Britt and Sommer, 2004; Nassaji, 2003). According to Van Dijk (1979; cited in Hutchins, 1987), text understanding requires the determination of the thematic and semantic progression of sentences and clauses at the lowest level referring to microstructure; however, there is also the construction of global organizational patterns associated with macrostructure. He claims that full or overall understanding of a text or the message in the text requires the integration of these skills with reader's background knowledge related to the main topics.

There are various text processing skills under micro and macro-level reading comprehension strategies. Most common ones analyzed by the researchers include note-taking strategies (Faber et al, 2000; Lia, 1993), free recall strategies (Berkemeyer, 1989; cited in Heinz, 2004), answering the short-answer and open-ended questions (Applegate et al., 2002; Lia, 1993), and summarizing which is a deeper processing task (Bensoussan and Kreidnler, 1990; Ayari, 1998; Britt and Sommer, 2004; Hutchins, 1987; Foss, 1995; Oded and Walters, 2001).

Summarizing as a Text Processing Skill: A Deeper Processing Task

Bensoussan and Kreidnler (1990: 55) define summarizing as “an activity well suited to sensitizing advanced foreign language readers to the inner workings of a text and weaning them away from word-to-word decoding”. In the summarizing process, the reader is asked to reproduce the text in a manner s/he remembers. It is based on the reader’s attending to the essential information in the text and also his/her self-remembering and interest. It is a good way to understand to what extent the reader can distinguish the important aspects in the text from the less important ones. (Ayari, 1998). Britt and Sommer (2004) claim that summarizing is also one of the higher level text processing skills that helps the reactivation of a text’s macrostructure. To form a summary, the reader selects only the most important information and eliminates the unnecessary details. S/he makes inferences from the related parts and reactivates his/her prior knowledge with the help of the integration process.

According to Foss (1995), summarizing refers to writing summaries of the main points of a portion of text that has just been read. Summarization is thought to be beneficial because it provides practice in retrieving important information, and retrieval practice has been shown to be beneficial for later performance in a variety of situations. The macroprocessing strategy training like main idea summarization supports reading comprehension, as readers find the opportunity to identify the important related points within the texts and they can combine them in the meaning-making process effectively. Summary writing enhances better understanding and recall of the main ideas in the text (Kobayashi, 2002). Summarization is directly related to metacognitive awareness and there are various studies investigating the summary training instruction as a metacognitive instruction process (Ponce, 2000). Studies in Literature reveal that making summaries enhances better retrieval and deeper processing in terms of reading comprehension.

Present Study

Based on the assumptions and findings of the previous studies done about text processing skills and reading comprehension in L2, the present study aimed to explore the effects of two different text processing skills as writing summary and listing the main points on EFL reading comprehension. Besides, it was expected to determine which skill promotes or enhances comprehension more at the end of the study.

Participants

The participants of the study were 50 second-year Turkish EFL University students from the same proficiency level and they were enrolled in the Department of Foreign Language Education of Anadolu University. They were from the same L1 background that is Turkish. There were generally female students, as the department is much more preferable by this group of learners. They had been learning English for at least 7 years by the time of the study. In order to enter this department, they passed the National Foreign Language Proficiency Exam and English Proficiency Exam administered by the university. The proficiency exam held by the university preparation department is equal to a TOEFL test with listening, grammar, reading and writing sections. Their English proficiency level was assumed to be Upper-Intermediate as they almost passed this exam. Besides, this group was selected

intentionally as they were taking both reading and writing courses as second year EFL university students. For the purposes of the study, they were divided into two groups randomly to perform the tasks. At the time of the study, they had already learnt certain reading and writing skills.

Instruments

A text used for the study was an 800-word entitled “Saving Nature, But Only For Men” (Time, 17 June 1991; see Appendix). As the text was used by Oded and Walters beforehand, its readability level was measured and they claimed that it was a suitable text in terms of content and level. As for comprehension questions in order to assess the understanding of the participants and also the comparison of two conditions, a set of seven multiple-choice comprehension questions designed by Oded and Walters were used without making any change. These questions were created according to focusing on the main ideas, purpose of the author, organization of the text and key supporting evidence. They claimed that there weren't not any open-ended or short-answer questions as the participant already write them through summaries and list of examples. However, in the current study, a set of four open-ended questions have been added in order to assess the comprehension of readers on explicit information given in the text. Their reliability was measured through a pilot study with 5 students from the same proficiency level as the target population in the study. The results of the reliability scores revealed that the items were reliable .87.

Research Questions and Hypothesis

1. What is the overall comprehension success of the summary writing group in terms of their multiple-choice and open-ended comprehension items scores?
2. What is the overall comprehension success of listing the main points group in terms of their multiple-choice and open-ended comprehension items scores?
3. To what extent is there a difference between deep and surface processing represented by two groups in the study?
4. Which one of these text-processing skills promotes reading comprehension more?

The main hypothesis was that summary writing would enhance integrative processing that involves both analysis and synthesis of various linguistic and cognitive domains and this will lead to better comprehension at the end. As a depth processing skill, it required macro level processing steps including selection of the main ideas, understanding the logical connections among them, spending more mental effort and more involvement while reading. On the other hand, listing the main points task was expected to result in less comprehension as a micro level strategy.

Procedure

The participants were divided randomly into two groups took two different conditions in the study. The first group taking the summary condition wrote a summary, while the other group listed the main points in the essay. The applications were conducted in their EFL classrooms. Every student was exposed to the same target text. Any extra instruction necessary was given by the researcher whenever needed.

Data Analysis

First of all, summaries were read by the researcher and a co-language teacher who was good at assessing the written responses of the students in order to see if participants really could catch the important idea units in the text or misread it. This was important since a wrong summary could be the reason behind wrong answers later on. The same thing was applied for the list of examples written by the participants, in order to evaluate whether the participants really gave correct examples or not (interrater reliability of the summary scores was .93; it was .88 for listing the main points group). Scores for the multiple-choice and open-ended comprehension questions were measured as a percentage of correct answers. This analysis was done for both summary and listing the main points groups separately. After the descriptive statistics, t-test was administered in order to examine the scores of the participants from summary and listing the main points conditions in terms multiple-choice and open-ended comprehension items. The results have been discussed under each research question below.

In order to address the first research question, first of all, overall mean percentages of the summary group in two different comprehension tasks was measured by measuring the percentage of the correct responses. Table 1 below indicates the overall percentage score of the summary writing group in multiple-choice and open-ended comprehension items. It was found that the mean score for the summary group in the multiple-choice task was .77,85; and this was very similar for the open-ended items task as the mean score for this task was 77,50. The results revealed that the summary group was highly successful at both comprehension tests.

Table 1. Comprehension Scores of the Summary Writing Group

Summary writing group	Mean
Multiple choice Questions	77,85
Open-ended Questions	77,50

In order to explore the success of the listing the main points group in these two comprehension tasks, overall mean percentages of this group were also analyzed by measuring the percentage of the correct responses. Table 2 indicates the overall percentage score of the this group in multiple-choice and open-ended comprehension items. It was found that the mean score of the examples group in the multiple-choice task was .47,14; while it was 58,75 for the open-ended items task. When compared with the summary group scores, it was observed that there was a great decrease of the success in the examples group.

Table 2. Comprehension scores of listing the main points group

Listing the main points group	Mean
Multiple choice Questions	47,14
Open-ended Questions	58,75

The summary writing condition was generally associated with the deeper processing, while listing the main points condition represented the surface processing. In that

sense, in order to explore the differences between these two processes, descriptive statistics were compared by applying a t-test. Table 3 indicates the findings of descriptive statistics and group dynamics for two different conditions at the same test. The t-test results performed on the descriptive scores revealed a significant difference between the two conditions ($p < 0.05$). The mean scores of the participants in the summary and example conditions were 5,45 and 3,30. As a result, the students who did summary task performed better on the multiple-choice comprehension task on the whole.

Table 3. Group statistics for the multiple-choice test

<i>Test</i>	<i>Condition</i>	<i>mean</i>	<i>SD</i>	<i>P</i>
Multiple-Choice	Summary writing group	5,45	,82	,000
	Listing the main points group	3,30	1,17	

The same statistical analysis and t-test were applied for the open-ended test scores, too. Table 4 indicates the findings of descriptive statistics and group dynamics for two different conditions at the same test. The t-test results performed on the descriptive scores revealed a significant difference between the two conditions ($p < 0.05$). The mean scores of the participants in the summary and listing the main points conditions were 3,10 and 2,35. As a result, the students who did summary task performed better on the open-ended comprehension test on the whole

Table 4. Group statistics for the open-ended test

<i>Test</i>	<i>Condition</i>	<i>mean</i>	<i>SD</i>	<i>P</i>
Open-Ended	Summary writing group	3,10	,85	,012
	Listing the main points group	2,35	,93	

The findings reported through t-test demonstrated that the summary group outperformed the listing the main points group both in the multiple-choice and open-ended scores, and this revealed that summary was a more promoting activity for overall reading comprehension and there were significant differences between these two different text processing skills or tasks.

Finally, in order to explore the difference between these two text processing skills, the overall descriptive statistics were analyzed for both tests. Table 5 indicates the overall mean percentages for summary and listing the main points conditions. It was found that the overall success in the summary condition was .77; while it was just .51 for the listing the main points condition.

Table 5. Total success percentage of two groups in both tests

<i>Overall success</i>	<i>Mean percentage</i>
Summary writing group	77,72
Listing the main points group	51,36

Conclusion and Discussion

The main purpose of the study was to examine to what extent two different text processing skills result in different performances and success rates in terms of overall reading comprehension. The underlying assumption was that as a depth processing skill, summary writing requires macro level processing steps including selection of the main ideas, understanding the logical connections among them, and spending more mental effort and more involvement while reading, which promote comprehension. In that sense, it was expected that the summary group would outperform the listing the main points group that was based on the surface level text processing and comprehension level only. It was expected that summary writing as a deeper process would facilitate or promote better comprehension.

The findings revealed that the overall comprehension and success of the listing the main points group on both tests were relatively lower when compared with the overall success of the summary group. Such a finding promotes the effectiveness of summary writing on the general reading comprehension process. In addition, it was found that both groups became more successful at the open-ended items. The main reason behind this was especially the similarity between the summary task and answering open – ended items. Both of them required a deeper process. Listing the main points group was also good at the open-ended items as they had also dealt with the main issue in the text while making lists of examples. However, writing only the key words in the text or forming an outline from the text are not as effective strategies as summary writing, since while writing summaries, the readers restructure the main ideas in the text and they have to form the logical connections among ideas in order to fulfill this task. All in all, it was found that summary writing was a better process to promote reading comprehension, because summary writers concentrate on the whole text, try to see the logical connections between ideas and paragraphs in order to get a clearer mental image at the end of the reading process.

The main implication for such a finding can be the effectiveness of summary writing training. To form a summary, the reader selects only the most important information and eliminates unnecessary details. S/he makes inferences from the related parts and reactivates his/her prior knowledge with the help of the integration process. As a macro-structure text integration process, summary writing is effective on promoting comprehension. It is hoped that the findings of this study will contribute to the general views towards teaching and gaining EFL reading comprehension process since summary writing is a good and effective practice to promote text comprehension. In that sense, language teacher may focus on the deeper processing in order to facilitate better comprehension and retrieval. The most important educational implication of this study can be to train less skilled readers to write a summary of the main ideas in the text they read. By doing so, they can realize the meaningful connections among ideas and can create maps for further information.

Bibliography

Alderson, J. C. (2000). *Assessing Reading*. United Kingdom: Cambridge University Press.

Applegate, M. D., Quinn, K. B. & Applegate, A. J. (2002). Levels of thinking required by comprehension questions in informal reading inventories. *The Reading Teacher*, 56, 174-181.

Ayari, S. (1998). *Using Oral Summarization to Assess English Reading Comprehension Arabic Speaking Learners of English*. (Doctoral Dissertation, University of Minnesota, 1997).

Bensoussan, M. & Kreindler, I. (1990). Improving advanced reading comprehension in a foreign language: summaries vs. Short-answer questions. *Journal of Research in Reading*, 13(1), 55-68.

Britt, M. A. & Sommer, J. (2004). Facilitating Textual Integration With Macro-Structure Focusing Tasks. *Reading Psychology*, 25, 313-339.

Eilers, L. H. & Pinkley, C. (2006). Metacognitive Strategies Help Students to Comprehend All Text. *Reading Improvement*, 43, 13-29.

Carrell, P. L. (1989). Metacognitive Awareness and Second Language Reading. *The Modern Language Journal*, 73, 121-134.

Faber, J. E., Morris, J. D. & Lieberman, M. G. (2000). The Effect of Note Taking on Ninth Grade Students' Comprehension. *Reading Psychology*, 21, 257-270.

Foos, P. W. (1995). The Effects of Variations in Text Summarization Opportunities on Test Performance. *Journal of Experimental Education*, 62(2), 1-7.

Geiger, J. F. & Millis, K. K. (2004). Assessing the Impact of Reading Goals and Text Structures on Comprehension. *Reading Psychology*, 25, 93-110.

Grabe, W. (1991). Current Developments in Second Language Reading Research. *TESOL Quarterly*, 25, 375-406.

Guterman, E. (2002). Toward Dynamic assessment of reading: applying metacognitive awareness guidance to reading assessment tasks. *Journal of Research in Reading*, 25, 283-298.

Heinz, P. J. (2004). Towards enhanced second language reading comprehension assessment: Computerized versus manual scoring of written recall protocols. *Reading in a Foreign Language*, 16, 97-124.

Hutchins, J. (1987). Summarization: Some Problems and Methods. *Proceedings of a conference Meaning: the frontiers of informatics*. Informatics 9. ed. Kevin P. Jones, London.

- Kobayashi, M. (2002). Method effects on reading comprehension test performance: text organization and response format. *Language Testing*, 19(2), 193-220.
- Kozmminsky, E. & Kozminsky, L. (2001). How do general knowledge and reading strategies ability relate to reading comprehension of high school students at different educational levels? *Journal of Research in Reading*, 24, 187-204.
- Lehto, J. E., Scheinin, P., Kupiainen, S. & Hautamaki, J. (2001). National Survey of reading comprehension in Finland. *Journal of Research in Reading*, 24, 99-110.
- Lia, K. S. (1993). *Summarization, Note-taking and Mapping Techniques: Lessons for L2 Reading Instruction*. Information Analysis, 070, (ERIC Document Reproduction Service No ED360816).
- Linderholm, T. Et al. (2000). *Effects of Causal Text Revisions on More-and Less Skilled Readers' Comprehension of Easy and Difficult Texts*. *Cognition and Instruction*, 18, 525-556.
- Nassaji, H. (2003). *Higher-level and Lower-level Text Processing Skills in Advanced ESL Reading Comprehension*. *The Modern Language Journal*, 87, 261-276.
- Oded, B. & Walters, J. (2001). *Deeper Processing for better EFL Reading Comprehension*. *System*, 29, 357-370.
- Weimin, W. (2001). *The Relative Effectiveness of Structured Questions and Summarizing on Near and Far Transfer Tasks*. Paper presented at the National Convention of the Association for Educational Communications and Technology, November 8-12, 2001
- Wixson, K. K. & Peters, C. W. (1987). Comprehension Assessment: Implementing an Interactive View of Reading. *Educational Psychologist*, 22, 333-356.

Appendix

Text: Saving Nature, But Only For Men

Environmental sensitivity is now as required an attitude in polite society as is, Say, belief in democracy or aversion to polyester. But now that everyone from Ted Turner to George Bush, Dew to Exxon has professed love for Mother Earth, how are we to choose among the dozens of conflicting proposals, restrictions, projects, regulations and laws advanced in the name of the environment? Clearly not everything with an environmental claim is worth doing. How to choose?

There is a simple way. First, distinguish between environmental luxuries and environmental necessities. Luxuries are those things it would be nice to have if costless. Necessities are those things we must have regardless. Then apply a rule. Call it the fundamental axiom of sane environmentalism: Combatting ecological change that directly threatens the health and safety of people is an environmental necessity. All else is luxury.

For example: preserving the atmosphere--stopping ozone depletion and the greenhouse effect--is an environmental necessity. In April scientists reported that ozone damage is far worse than previously thought. Ozone depletion not only causes skin cancer and eye cataracts, it also destroys plankton, the beginning of the food chain atop which we humans sit.

The reality of the greenhouse effect is more speculative, though its possible consequences are far deadlier: melting ice caps, flooded coastlines, disrupted climate, parched plains and, ultimately, empty breadbaskets. The American Midwest feeds the world. Are we prepared to see Iowa acquire Albuquerque's climate? And Siberia acquire Iowa's?

Ozone depletion and the greenhouse effect are human disasters. They happen to occur in the environment. But they are urgent because they directly threaten man. A sane environmentalism, the only kind of environmentalism that will win universal public support, begins by unashamedly declaring that nature is here to serve man. A sane environmentalism is entirely anthropocentric: it enjoins man to preserve nature, but on the grounds of self-preservation.

A sane environmentalism does not sentimentalize the earth. It does not ask people to sacrifice in the name of other creatures. After all, it is hard enough to ask people to sacrifice in the name of other humans. (Think of the chronic public resistance to foreign aid and welfare.) Ask hardworking voters to sacrifice in the name of the snail darter, and, if they are feeling polite; they will give you a shrug.

Of course, this anthropocentrism runs against the grain of a contemporary environmentalism that indulges in earth worship to the point of idolatry. One scientific theory--Gala theory--actually claims that Earth is a living organism. This kind of environmentalism likes to consider itself spiritual. It is nothing more than sentimental. It takes, for example, a highly selective view of the benignity of nature. My nature worship stops with the April twister that came through Andover, Kans., or

.the May cyclone that killed more than 125,000 Bengalis and left 10 million (!) homeless.

A nonsentimental environmentalism is one founded on Protagoras' maxim that "Man is the measure of all things." Such a principle helps us through the thicket of environmental argument. Take the current debate raging over oil drilling in a corner of the Alaska National Wildlife Refuge. Environmentalists, mobilizing against a bill working its way through Congress to permit such exploration, argue that we should be conserving energy instead of drilling for it. This is a false either/or proposition. The country does need a sizable energy tax to reduce consumption. But it needs more production too. Government estimates indicate a nearly fifty-fifty chance that under the ANWR lies one of the five largest oil fields ever discovered in America.

We have just come through a war fought in part over oil. Energy dependence costs Americans not just dollars but lives. It is a bizarre sentimentalism that would deny ourselves oil that is peacefully attainable because it risks disrupting the calving grounds of Arctic caribou.

I like the caribou as much as the next man. And I would be rather sorry if their mating patterns are disturbed. But you can't have everything. And if the choice is between the welfare of caribou and reducing an oil dependency that gets people killed in wars, I choose man over caribou every time.

Similarly the spotted owl. I am no enemy of the owl. If it could be preserved at no or little cost, I would agree: the variety of nature is a good, a high aesthetic good. But it is no more than that. And sometimes aesthetic goods have to be sacrificed to the more fundamental ones. If the cost of preserving the spotted owl is the loss of livelihood for 30,000 logging families, I choose family over owl.

The important distinction is between those environmental goods that are fundamental and those that are merely aesthetic. Nature is our ward. It is not our master. It is to be respected and even cultivated. But it is man's world. And when man has to choose between his well-being and that of nature, nature will have to accommodate.

Man should accommodate only when his fate and that of nature are inextricably bound up. The most urgent accommodation must be made when the very integrity of man's habitat--e.g., atmospheric ozone--is threatened. When the threat to man is of a lesser order (say, the pollutants from coal- and oil-fired generators that cause death from disease but not fatal damage to the ecosystem), a more modulated accommodation that balances economic against health concerns is in order. But in either case the principle is the same: protect the environment--because it is man's environment.

The sentimental environmentalists will call this saving nature with a totally wrong frame of mind. Exactly. A sane--a humanistic--environmentalism does it not for nature's sake but for our own.

Multiple-choice comprehension questions on the text:

1. What is the main purpose of the writer?
 - a. to present the different views on environmentalism
 - b. to argue for his type of environmentalism
 - c. to argue against any kind of environmentalism
 - d. to analyze the reasons for environmentalism

2. How does the writer organize the text?
 - a. as a contrast between two kinds of environmentalism
 - b. as a description of environmental problems on earth
 - c. as a history of the relationship between environmentalism and democracy
 - d. as an analysis of environmental disasters in the past

3. Which idea below does the writer consider most important in a correct theory of environmentalism?
 - a. sacrificing for other creatures
 - b. providing for the needs of man
 - c. fighting the danger of pollution
 - d. taking steps to preserve nature

4. According to the writer, why should we save nature?
 - a. because nature is beautiful
 - b. because there is too much waste
 - c. because nature benefits us
 - d. because we are spiritual creatures

5. At the end of paragraph 7, the writer mentions “the many deaths caused by natural disasters.” What general point does this example illustrate?
 - a. The Earth is a living organism.
 - b. Nature is not only benign.
 - c. Nature selects its victims.
 - d. Man is a measure of all things.

6. Why is the writer in favor of oil drilling in Alaska?
 - a. He feels that Americans need to reduce energy consumption.
 - b. He does not believe in energy taxes for oil consumption.
 - c. He believes that America should not fight wars to obtain oil.
 - d. He is sentimental about conserving the Arctic reindeer.

7. According to the writer, which example illustrates an environmental luxury?
 - a. stopping the greenhouse effect
 - b. stopping ozone depletion
 - c. stopping oil drilling in Alaska
 - d. stopping the use of oil-fired generators.

Open-ended comprehension questions on the text:

1. What is the boundary between environmental necessities and environmental luxuries?
2. What is the main point that the author suggests behind the ozone depletion and greenhouse effect examples?
3. What is the debate about oil drilling in the text?
4. According to the text, what do you understand from the following quotations; “nature is here to serve man” and “protect the environment, because it is man’s environment”?