

The Extent of Including Environmental Education in Action Pack Series from Five to Seven

Abeer Mohammad Al-Refai , Wesal Hani Al-Omari

College of Education, Yarmouk University, Jordan

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Abstract

This study aims to explore the potential of including the main environmental education themes accredited by the researchers in EFL Jordanian materials. To achieve the aim of the study, the textbooks being taught for the fifth, sixth and seventh grades were selected. As a qualitative inquiry technique, content analysis was used. Three main categories of environmental education (knowledge, attitudes, and behaviors) and their sub-categories were determined. It was found that the most cited environmental education category was knowledge. Others were relatively less emphasized. Results showed that Action Pack textbooks under analysis have the potential to support the development of environmental education. Enhancing the inclusion of the fields of attitudes and behavior in the Jordanian English language curricula (Action Pack). In addition, including the main environmental education themes in other textbooks because of their role in enhancing students' environmental knowledge and building their behavior to be consciously responsible citizens in the future.

Keywords: Environmental education, Action Pack Series, English language, Jordan.

مدى تضمين التربية البيئية في سلسلة كتب اللغة الإنجليزية (Action Pack) من الصف الخامس حتى السابع الأساسي

عبير محمد الرفاعي، وصال هاني العمري
كلية التربية، جامعة اليرموك

ملخص

الأهداف: استكشاف مدى تضمين مجالات التربية البيئية الرئيسية المعتمدة من قبل الباحثين في مناهج اللغة الإنجليزية الأردنية. (Action Pack).

المنهجية: تحقيقاً لهدف الدراسة، تم اختيار مناهج اللغة الإنجليزية التي يتم تدريسها للمراحل الدراسية من الخامس الأساسي حتى السابع الأساسي كعينة لهذه الدراسة. وباعتبارها تقنية بحث نوعية، تم استخدام تحليل المحتوى وتحديد ثلاث مجالات للتربية البيئية كفئات رئيسة للتحليل وهي: المجال المعرفي، المجال الوجداني والمجال السلوكي، كما تم تحديد فئات فرعية لكل منها .

النتائج: إن مجال المعارف البيئية كانت الأكثر ذكراً وتضميناً في مناهج اللغة الإنجليزية الأردنية (Action Pack) ، فيما تم تضمين مجالي الاتجاهات والسلوك على نحو أقل تركيزاً. كما أظهرت النتائج بأن مجموعة الكتب الدراسية عينة البحث تسهم في دعم تطور ونمو التربية البيئية معرفياً ووجدانياً ومهارياً لدى الطلبة.

التوصيات: تعزيز تضمين مجالي الاتجاهات والسلوك في مناهج اللغة الإنجليزية الأردنية (Action Pack)، وتضمين التعليم البيئي في الكتب المدرسية الأخرى لما له من دور في تعزيز المعرفة البيئية للطلاب، وبناء سلوكياتهم ليكونوا مواطنين مسؤولين بوعي في المستقبل.

الكلمات الدالة: التربية البيئية، سلسلة (Action Pack)، اللغة الإنجليزية، الأردن.

1. Introduction

The enhancing of high-quality citizens has been an essential aim of education. All the way through history, schools have perceived that it is indispensable to raise students so that they share the duty and obligation to humanity.

In the late twentieth century, environment concepts began to be more evident when environmental problems started to appear and to become life-threatening. Due to the increase in the environmental problems and concerns about the future of the world, there has been an urgent need to raise environmentally- conscious individuals which greatly affected the educational policies in many countries.

During the 1970s, a great effort was jointly made by UNESCO to place environmental education at the top of their priority, as an integral part of the diverse solutions to environmental problems produced by human beings. Remarkably, in response to the recommendations of international conferences and their concerns in environmental education, efforts have been directed towards the need to include environmental education in curricula and textbooks, considering it as not an independent subject and should be taught in accordance with the principle of the educational integration through curricula (UNESCO, 2005).

Environment could be simply defined as: the surroundings or conditions in which a person, animal, or plant lives or operates. Environmental education is a learning process that increases people's knowledge and awareness about the environment and related challenges, develops the necessary skills and expertise to address the challenges and enhance attitudes, motivations and commitments to make glowing decisions and take responsible Action (UNESCO, Tbilisi Declaration, 1978).

Brown (1991: 4) maintained that one of teachers' goals should be helping their students "become informed about as many issues as possible that intrinsically affect their lives". Instilling environmental education involves language teachers' identification of their roles as diverse through focusing on different topics connected to environment. In line with this idea, English language textbooks have a significant part in building and increasing a base for environmental education.

The three main educational systems in Bangladesh, ordered to teach environmental education at three levels under General Education Systems: Primary Level (years 1-5); Junior High (years 6-8) and Secondary Level (9-10) since these school levels are largely supported by the Government (Chowdhury, 2014).

Literature review

Environmental education is a necessity at present as environmental problems have become a global phenomenon. The goal of environmental education is to develop citizens aware of and concerned about the environment and its relatable problems (UNESCO, 1980).

Al-Asmari (2012) believes that there are three goals for environmental education: Cognitive goals which identify the characteristics of the environment, its interaction with humans and the role of the civil institutions in preserving it, emotional goals which develop students' environmental values, awareness of natural resources and to appreciate the greatness of Allah Almighty who created the universe and the behavioral goals which develop the ability to practice scientific and direct observations of the environmental phenomena and to discuss its scientific related issues.

Simon and Lambert (2006) emphasize that school curricula should include environmental concepts divided into four axes:

1. The ecosystem which includes the definition of the environment, its types and resources, factors affecting the biodiversity and the environmental balance.
2. Natural resources which include: water, air, plant, forests, seas, oceans, rivers, lakes, dams and animals.
3. Population and environment: It includes the population structure, humans' impact on the environment, their role in protecting and preserving its resources.
4. Environmental problems which include: environmental pollution, environmental change, natural activity, noise pollution, chemical pollution, climate and global warming.

Al-Khamisi (2000) and Ford (2004) focused on a set of environmental concepts that must be taught to students in the basic education stage. These concepts relate to:

1. Environment and Ecology.
2. Ecosystem.
- 3- Environmental sciences.
4. Biosphere.
5. Technical environment.
6. The social environment.
7. Preserve the environment.
8. Environmental problems.
9. Methods of environmental protection.
10. Environmental activities to promote environmental awareness.

Mahjoub (2013) believes that including the environmental concepts in curricula can greatly contribute to raising environmental awareness among students as it is a shared responsibility for all disciplines.

Stockholm Conference, held under the patronage of UNESCO in 1972, recommended that environmental education programs should be developed in various public education stages. The Tbilisi Conference in 1977 recommended that environmental Problems must be addressed and promoted through educational approaches (Shalabi, 1990).

Since the cause of environmental problems is human, the solution is also human. Teaching people about environment and sustainable development is significantly important to solve these problems. But in order to harvest the fruits of environmental education, seeds must be planted early. Students at early stages should be taught the main concepts of environmental education and to be part of their daily life along with its three main domains: knowledge, attitudes and behaviors.

One of the most pivotal principles for the success of environmental education is the necessity that all curricula should contribute to teaching environmental knowledge, values and behaviors (Tantawi, 2008). Language teaching is not far from these efforts. The basic goal of teaching any language is to improve students' basic language skills. To this end, these classes cover a curriculum and materials that will support students' reading, listening, speaking, writing and grammar skills. In addition to these explicit goals, these classes have some implicit ones such as: cultural values, socializing students, raising democratic people, technology-literate and environmentally-educated individuals. The materials used should be selected to serve both the explicit and implicit ones (Sallabas, 2013).

Environmental education could be incorporated in many curricula such as English language, Physical education, art and technology which provide opportunities for teaching implicitly or explicitly the concepts, attitudes and behaviors of environment (Curriculum Corporation, 2000).

Lobanov and Skvortsov, (2013: 253) stated that "As language teachers, we are the most fortunate of teachers. All subjects are ours. Whatever our learners want to communicate about, whatever they want to read about is our subject matter". He added that, English language teachers as all other professionals can participate one way or another to stop the retrogression of the environment. They need to use their job not only to develop students' communication skills, but also to give knowledge and attitudes that will affect the world's problems in general and the protection of environment in particular. Thus, teaching English as a foreign or second language should not be limited only to improving language proficiency, but also to training students for critical thinking strategies that can be helpful for sustaining and promoting environmentally responsible citizens (Stavreva & Kirova, 2013).

Setyowati and Widiati (2014) encourage to connect students to life beyond school, making them aware of its challenges. They stated that including environmental issues into English teaching classroom is highly possible. There is no time anymore for students to sit silently learning. It is time to explore their surroundings and to learn from their environment and how to protect it.

According to Jacob and Cates (1999), environmentally conscious activities include: planting trees, reducing the use of papers, plastic and energy, re-using of material, buying products made from recycled materials.

Clarifying the need to include environmental matters in English language instruction, Cates (1997) points out that " We

can't call our English teaching successful if our students, however fluent, are ignorant of world problems, have no social conscience by using their communication skills for international crime, exploitation, oppression or environmental destruction."

Noah (2007) confirmed the role of language teaching in environmental education. He recommended the need to hold short courses for English language teachers in order to familiarize them with the roles of the curricula they teach towards the environment.

Plethora of research (e.g., Brown 1991; Friel ,1991; Gambee & Klausman 1992; Jacobs 1993; Jacobs & Cates 1999; Trisler, 1993; Tang, 2009) showed that global issues such as environmental problems and energy crisis affect each person on the earth. These issues can be relevant to be incorporated in language learning.

In reviewing the previous educational literature, Hausbeck, Milbrath and Enright (1992) examined the environmental knowledge, awareness and concerns among high schools students in New York City. The research sample consisted of 3200 students from the 11th grade. The results showed that students got low grades in the scientific knowledge about the environment but higher grades in the environmental awareness and concern, the researchers added that 65% of students want to have more environmental curricula in the secondary stages. The researchers recommended that environmental curricula should be improved in New York and America in general.

Ramsey (1993) investigated the effect of applying environmental education training program on the eighth grade in the middle school and whether this program will improve their responsible environmental behaviors. The data revealed that such a training program in school curricula would likely seem to achieve the goal of citizens' participation in environmental issue remediation.

Sa'eed (2004) tried to find out the role of physical education curricula in providing environmental concepts to students in the basic education stage in Egypt and the activities of environmental education that could be provided. The researcher used a content analysis of the curricula of physical education in the basic stage to identify the availability of these concepts and activities, and to identify the opinions of their teachers. In light of the research results, the researcher found that there are no concepts and activities for environmental education in the curricula of physical education at the basic education stage. The researcher recommended the need to review the current curricula of physical education and to have a major focus on the concepts and activities related to environmental education.

Alshareef (2011) tried to identify the role of art education curricula in the general education schools in Sudan in promoting students' attitudes and behaviors towards the environment. The results revealed that there is a lack of interest in environmental awareness through curricula. The research recommended to adopt the integrative approach in teaching and to connect students with their environment through all school curricula.

Nkwetisama (2011) examined the perception of environmental education by the EFL/ESL teachers in Cameroon and integrating it in language teaching. One textbook was randomly selected. The analysis revealed that there were many issues and themes about the environmental crises such as endangered species, waste minimization, and deforestation. There were images, passages and poems about the environment. Some teachers' lesson notes were examined. The analysis showed that although the textbook contained environmental themes, the teachers did not use their language teaching profession to enable learners to deal responsibly with global crises in general and environmental protection or education in particular. The researcher found out that environmental education does not have its proper weight in curricula, and there is ignorance in generating and sustaining environmental awareness among Cameroonian learners. It was also revealed that teachers do not conscientiously incorporate environmental education in their English language teaching. The researcher confirmed that including environmental education in English language classroom may seem difficult, but it is worth trying if we actually look forward to the welfare of our environment which is becoming a salient threat to humanity.

Erdoğan, Coşkun and Uşak (2011) analyzed the components of environmental literacy embedded in the classic works recommended for Turkish elementary schools. The results revealed that environmental pollution, which is one of the main topics and emphases of environmental education was paid very little attention. The concepts like curiosity and awareness on the environment were not mentioned in the books recommended to students. They recommended that environmental

education should be infused in other subjects and classroom activities.

Stavreva and Kirova (2013) examined how environmental education could be integrated into teaching English in Macedonia from the teachers' perspectives. It was revealed that using English language teaching in raising and sustaining environmental awareness in Macedonia was fairly ignored despite the existence of a growing interest in introducing environmental education in teaching English. The researchers added that the incorporation of environmental education into English language teaching could raise the environmental awareness of the global debatable environmental problems and issues.

Setyowati and Widiati (2014) concluded in their meta analysis study that a genre-based approach is a tool to help students master the language, broaden their knowledge about the world, and express their opinions about environmental problems and the ways to solve them. However, it does not necessarily mean doing it in every lesson, but to be regular part of the curriculum, not just something that is addressed once or twice a year.

The present study has benefited from the previous studies in clearly crystallizing its goal and building its instrument. It is evident that there is a good body of research conducted to examine how well environmental education is included in different textbooks and curricula. However, none of them analyzed EFL textbooks in Jordan, which makes this study distinctive.

Problem of the study

Environmental education is practical knowledge. Due to its close connection to students' lives and environmental problems, it must be reflected back on their behaviors. Therefore, as prevention is better than cure, it must be integrated into all educational curricula in order to instill an appropriate environmental behavior, knowledge and attitudes in them.

The idea of this study emerged through the researchers' desire to know the extent to which Action Pack series from 5-7 grades contribute and support the knowledge, skills and attitudes towards environmental education. From the researchers' point of view, English language curriculum is no less important than the other curricula, it should include the knowledge, skills and values of environmental education, which contributes to building and developing students' environmental education.

Purpose of the study

The aim of the study is to explore the extent to which environmental education knowledge, skills and attitudes are included in Action Pack Five, Six and Seven.

Question of the study

This study will answer the following question: To what extent is environmental education included in Action Pack Five, Six and Seven?

Significance of the study

This study will be significant for these reasons:

- Authors and developers of English language curricula should take environmental education into consideration while formatting their educational policies.
- Teachers and students should pay more attention to the knowledge, skills and attitudes of environmental education inside and outside the classroom. This study may raise their awareness toward this issue.

Operational definitions

Environmental education: in this study it means the set of knowledge, values, concepts and environmental behaviors available in Action Pack series from five to seven.

Limitation of study

This study is limited to Action Pack series from five to seven during the summer of the school year 2018. The conclusion can be generalized with regard to the themes generated in this study and the cases under investigation.

Research method

Berelson (1952:74) defined content analysis as "a research technique for the objective, systematic and quantitative description of manifest content of communication". In this study Action Pack series from five to seven were content analyzed to find out the extent to which environmental education knowledge, attitudes and behaviors are included.

Study instrument

The researchers used the instrument developed by Erdoğan, Coşkun and Uşak (2011) to analyze literary texts. They initially reorganized the components of environmental education and grouped them into three categories: Knowledge, attitudes, and Environmentally Responsible Behaviors. Then, they figured them into sub-categories which they use to name the codes and the themes in the analysis. Some paragraphs were deleted based on the recommendations of some experts after verifying their validity.

Criterion of analysis

It relates to the criteria defined by the researcher to judge the topic. Researchers collect information in an objective way, then analyze, interpret and classify it according to specific criteria determined in advance such as inclusion, authenticity, appropriateness...etc. To meet the purpose of the study, the inclusion of environmental education was selected to meet the purpose of the study.

Categories of analysis

The categories are the three main dimensions of environmental education:

- 1- Knowledge.
- 2- Attitudes.
- 3- Behaviors.

Unit of analysis

The units of analysis are all pictures, activities and reading texts in the content under investigation.

Reliability of Content Analysis

The researchers repeated the analysis one week after the first one using the same rules and procedures. Consequently, Scott co-efficient formula was used. The consistency was (0.90) which indicates a high agreement between the two analyses.

Findings and Discussion

Each textbook was read and analyzed with great care, noting the parts that could be related to environmental education. The notes were compared to the framework developed by Erdogan et al. (2011). Then a Table was presented for each category to organize the results. The Tables show the themes, frequencies and percentage in each textbook under analysis.

Environmental Knowledge:

Table 1 presents the frequencies and percentages of the environmental knowledge included in Action Pack 5-7.

Table 1: Frequencies and percentages of environmental knowledge included in the textbooks under investigation.

Theme		Frequencies			Total
		AP 5	AP 6	AP 7	
1	Description of the Environment	15	11	5	31
2	Natural Disasters	-	-	3	3
3	Ecological Conditions:	9	3	-	12
	Habitats of animals	4	-	-	4
	Habitats of plants				
4	Geographical patterns:	1	2	-	3
	Day/night	2	4	-	6
	season/climate				
5	Environmental pollution:	-	-	-	-
	Soil pollution	-	-	-	-
	Noise pollution				
6	Environmental protection:		-	-	3

Theme		Frequencies			Total
		AP 5	AP 6	AP 7	
	-Struggle with natural difficulties	3			
	-Protection of animals/natural hazard	2	-	-	2
Total		36	20	8	64
Percentage					36

It is clear in Table 1 that environmental knowledge is well presented in the textbooks under analysis. The description of environment was introduced explicitly and cited in 31 texts and activities. The description of environmental pollution was not shown in any grade and totally neglected by textbook writers.

In Action Pack five, activity 1 one page 10 asks students to read a paragraph and match it with a picture. The paragraph is about a plant which is near a river, on the side of a hill. The leaves are tall and triangle. The sun is circle. The objective of the lesson is to recognize the shapes through describing different objects in the environment.

Activity number 5 on page 11 and activity number 6 page 31 instill appreciation and love to environment and natural beauty through pictures for the sun, sea and trees. Activity number 7 page 35 asks students to read a paragraph describing a journey. It talks about a journey in summer to the beach:

The sea was very beautiful and the boats were very exciting. It was very lovely day.

In Action Pack six there are a lot of pictures for environment such as: Jordan River, Zarqa River, the Dead Sea, Dibein Forest Bird Park and Water Park.

Activity number 4 on page 18 requires students to read a paragraph about a holiday surprise and then to answer the related questions. The paragraph talks about a holiday out of the city. The family saw trees, farms and mountains. Then they travelled down along the road and saw rocks and mountains. They reached a place with no trees or houses. They were in the desert. The paragraph is clearly attracting students' attention to appreciate the environment.

In activity number 4 page 22 students read a paragraph about Ajloun:

It is a beautiful city .there is hills and valleys. There is a big forest too. There are a lot of interesting trees and plants in the forest and many animals live there.

The researchers believe that such activities enhance students' environmental knowledge and create positive attitudes towards it. The information on ecological conditions was cited in 16 texts, activities and pictures, while 12 items covered animal nature and 4 covered plant nature.

Activity number 4 on page 30 asks students to read short paragraphs and match them with the right pictures:

Picture A talks about a baby giraffe. It is one of the heaviest baby animals. It weighs more than hundred kilos. It does not how to use its trunk. It sometimes plays with it.

Picture B talks about a baby elephant. It can climb trees. Its mother cannot because it is heavier. It is brown. It can smell better than most animals.

Picture C talk about a baby bear. It is two meter tall. That is taller than a horse. It can walk when it is about one hour old. When it is bigger it eats leaves from tall trees.

These paragraphs are very noticeably supporting students' knowledge and appreciation towards animals. In activity number 4 page 46 there is a paragraph addressing both plants and animals:

Most of the food we eat comes from plants and animals. Farmers grow plants and keep animals to give us meat and eggs. Vegetables come from plants. Farmers in the Jordan valley grow vegetables. There are tomatoes, potatoes and onion. In the north of Jordan farmers grow olives. Olive trees grow on the sides of the mountains.

Thinking deeply in this paragraph, students will be greatly affected to raise animals and plant different kinds of trees.

In Action Pack six, activity number 4 page 22 asks students to read and answer questions about two cities: Ajloun and Kuwait. The paragraph gives important knowledge about Ajloun city. The trees, valleys, plants and animals living there increase student environmental knowledge about this interesting touristic site in Jordan.

In Action Pack seven activity number 4 page 18, students read a very significant paragraph about global warming, its definition and how to slow it down. This knowledge is critically needed due to the serious problems we suffer from as a result of global warming:

Man's machines, cars, planes, trains and computers emit carbon dioxide which doesn't allow the heat from the sun to leave. When there is too much carbon dioxide in the atmosphere, the earth temperature goes up. This is called "global warming".

On page 21 under the title **Do You Recycle**, students are asked to guess the meaning of the words: environment, pollution, recycles, to rinse, nappies, and then to check their meaning in the classroom dictionary. The meanings of these words are considered very important and support students' environmental knowledge before learning how to recycle.

Activity number 6 on page 26 requires students to match words related to environment with their definitions, such as earth, global warming, environment and flood. The information related to these words increases students' environmental knowledge, the natural and artificial disasters we suffer from. Natural disasters (fires, flood and earthquake) and their effects are cited just three times in Action Pack seven. There are two pictures about a fire set on trees on page nine and ten. Flood was shortly introduced. No knowledge of hurricanes, earthquakes or volcanoes was found in the textbooks. Knowledge about environmental pollution was not observed at all within the textbooks. Even though air and water pollution are common phenomena, they are not mentioned in any textbook. The analysts suggests that even these disasters rarely occur in our environment, students knowledge in this regard should be enhanced through reading texts, activities and related pictures.

Environmental knowledge is clearly included in the three grades under study. It was cited in 64 texts and activities in all textbooks under analysis and ranked second with a percentage of 36, which is close to the percentage of environmental behaviors. It is important to have a balance between these two aspects. Knowledge must be applied and reflected on students' behaviors. Environmental awareness and knowledge should be developed in the first place, and then transformed into practices. Students need knowledge and information to identify the environmental problems and their effects on both humans and environment, misuse of natural resources, and other relevant knowledge that directly connects them to their environment.

Attitudes:

Table 2 presents the frequencies and percentages of the environmental attitudes included in Action Pack 5-7.

Table 2: Frequencies and percentages of environmental attitudes included in the textbooks under investigation.

Theme		Frequencies			Total
		AP5	AP6	AP7	
1	Attitude Towards animals	3	8	1	12
	Towards plants	4	1	1	6
2	Appreciating natural beauty.	5	10	1	16
3	Love of animals.	3	1	-	4
4	Happiness to live in clean environment	2	-	3	5
Total		17	20	6	43
Percentage					24.43

It is clear in Table 2 that environmental attitudes are presented in the textbooks under analysis. The most cited theme was appreciation of natural beauty. Attitudes towards animals were the second most observed theme. Attitudes towards plants and love of animals did not seize the interest of the textbooks under analysis.

In Action Pack five, activity number 4 on page 10 students read short paragraphs and match them with the right pictures. One of them is a mosaic for a beautiful horse which reflects our historical love and appreciation to this animal.

In activity number 4 on page 17 students look at four pictures and say the words related to them. One of them is for a boy admiring a plant. This picture represents an implicit message to appreciate the natural beauty and to raise and protect plants.

In Unit five, page 20 there is a description of different types of transport such as lorries, motorbike, cars and planes. There is also an implicit message here that could be clarified by the teacher about the effect of these vehicles on air pollution. Activity number 1 page 48 asks students to listen and read about the Arabian Oryx. There is a family visiting the Shaumari Nature Reserve. The reading text greatly develops a positive attitude towards Jordan's national animal.

In Action Pack six, unit four is entitled with "**Jordan is not as dry as Egypt**". There are some reading texts and pictures that foster students' love of natural beauty and encourage their attitudes towards animals and natural places in Jordan such as Aqaba, Debin and Dead Sea:

Jordan is a fascinating country. There are mountains, dessert, canons and valleys. There are nature reserve and forest too. My favorite place is Aqaba. It is on the coast. There are beautiful coral reefs in the sea. My favorite place is the dessert. There are sand dunes. I like gazelles and lizards.

In activity number 4 on page 22 students read a paragraph about Ajloun city then answer yes/no questions:

I live in Ajloun in Jordan. It is a beautiful city. There are hills and valleys. There is a big forest, too. There are a lot of interesting trees and plants in the forest and many animals live there.

The text attracts students' attention to the different natural scenes and landscapes. Students think deeply and critically about the significance of living in a natural environment and enjoying its magical scenes.

Activity number 4 page 26 describes the bird park in Amman. Many beautiful animals are mentioned such as ducks, geese, pigeons and peacocks in a way that attracts students and encourages them to care for animals.

In activity number 2 on page 53 students answer questions about tasks done at home. Among these tasks, there is a boy washing a car without using a hose and a girl watering flowers. There are two messages the teacher could explain: the importance of saving natural resources and not to waste water through its excessive use, then planting and protecting trees.

In activity number 5 on page 66 students read a paragraph about the young inventor, who, due to the shortage of water,

invented a new machine to water the plants in summer and keep them warm in winter. This reading text raises students' awareness of the importance of saving resources and having responsible behaviors towards keeping them.

In Action Pack six, activity number 3 page 29 requires students to listen and select the right picture about the sports that Ali and Kareem talk about. The pictures are explicitly types of sports and implicitly show the beauty and splendor of environment. The sports are snorkeling, hiking, cross-country running and jogging. All of them show the natural beauty of the environment.

Attitudes were cited in 43 texts, pictures and activities and ranked third with a percentage of 24. Environmental education provides students with a sense of responsibility and opportunities to develop their tendencies, interests and attitudes towards the environment by instilling positive attitudes towards appreciating its natural beauty, fighting its problems, preserving its resources and protecting it from hazards, in addition to appreciating the greatness of the Almighty Allah in creating a healthy and balanced environment for human beings. Ranking last does not underestimate it. However, when knowledge is introduced to students and reflected on their practices and behaviors, this means that values and attitudes are inevitably present.

Behaviors:

Table 3 presents the frequencies and percentages of the environmental behaviors included in Action Pack 5-7.

Table 3: Frequencies and percentages of the responsible behaviors towards environment included in the textbooks under investigation.

Theme		Frequencies			Total
		AP5	AP6	AP7	
1	Physical Action / Eco-management	2	5	16	23
2	Planting and protecting plants	4	11	2	17
3	Raising and protecting animals	-	6	-	6
4	Saving resources	1	9	-	10
5	Preventing environmental pollution	-	6	7	13
6	Preventing Soil pollution	-	-	-	-
Total		7	37	25	69
Percentage					39.20

Table 3 shows that environmental behaviors are well presented and considered in the textbooks under analysis. Responsible environmental behaviors were relatively more addressed in the textbooks particularly in the sixth and seventh grades. Physical actions towards environment in the current study seem to be taken care of a reasonable extent. Planting and protecting plants scored a relatively sensible reoccurrence in different texts and activities. Prevention of soil protection was totally ignored. It could be justified that this topic is above the students' cognitive level in these grades.

In Action Pack five environmental behaviors were slightly addressed. From the analyst's perspective it seems logical at this age as it is better to provide students with knowledge first then to activate it in latter classes. Activity number 2 page 16 requires students to ask and answer questions using how often: they see their relatives, help mum and dad. There is one sentence that refers to environmental behavior which is watering the flowers.

In Action Pack six, activity number 2 page 49 asks students to listen and choose from the pictures the activities that Samira and her mother did. One of these activities is watering the plants. This activity is introduced before in an attempt to encourage students to take care of the plants.

In activity number 1 page 68 the students are taught why animals and plants become extinct and how to protect them. They are also encouraged to use water carefully and not to waste it, not to pick up flowers, drop rubbish, hunt in the nature reserve and not to cut down trees.

In Action Pack seven on page 18, students read a paragraph about global warming, its definition and reasons and how to slow it down. Then it is followed by questions such as: how is the man responsible for global warming? Why should not we play computer and video games all the time? What will happen if we did not try to slowdown the global warming?

These questions raise students' awareness of this environmental disaster and the necessity to fight it.

Activity number 7 on page 20 asks students if they are good global warming fighters through answering very interesting questions such as: How often do you turn off lights when you leave the room? How often do you walk to school? How often do you turn off water when brush your teeth? Such questions enhance and support students' behaviors towards fighting global warming.

Activity number 1 on page 19 asks students to complete sentences related to slowing down the global warming through the imperative (affirmative and negative).

In activity number 2 on page 22 students learn how to recycle paper and plastic. In the same activity, students are encouraged to join the Kids Ecology Club which enhances students' behaviors towards preventing environmental pollution and saving resources:

Tareq: Hi Laila, how are you?

Liala: Hi Tareq, I am very busy. I am a member of the Kids Ecology Club.

Tareq: what is the Kids Ecology Club?

Laila: it is a non-profit organization. It helps young people to defend the environment.

Tareq: and what do you do?

Laila: we take part in project about keeping our cities clean. We also try to develop ways to preserve water and energy and to prevent pollution.

Activity number 1 on page 24 asks students to start some environmental projects like:

planting trees, grass in the school garden, recycling papers at school and at home. The analyst believes that such activities let students shoulder some responsibility towards their environment and create responsible citizens in the future.

Environmental behaviors ranked first. They were cited in 69 texts and activities with a percentage of 39. This proves that knowledge has no value without real life application; it is like a book that is never read. The texts and activities activate students' positive knowledge and attitudes towards the environment through protecting it, attempting to solve its problems and reducing pollution by concrete practical means.

Inferences

The findings of the analysis revealed that environmental education is adequately integrated and counted a reasonable worthy presence in Action Pack series from 5-7, and it has the potential to support other curricula in this regard. Environmental education embedded in the textbooks under analysis fosters students' environmental knowledge, enhances their attitudes, and builds their behaviors to be consciously responsible citizens in the future.

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