The Effectiveness of An English Language Program to Develop Al-Azhar Secondary School Students' Environmental Literacy in Light of Holy Quran and Sunnah

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Abstract

Environmental literacy results from education. Improving curricula has a great role in education reform. Our target is to develop Al-Azhar secondary schools' English curricula. The main purpose of this study is establishment of programs in educational curricula related with global trends lead to education reform in the right direction. The research is done through several steps. The first step is an analysis of English Al Azhar secondary stage curricula (Islamic Book) to evaluate its content of environmental concern. The second step is designing a questionnaire for environmental and educational specialists in order to select the best subjects for developing students' environmental literacy in light of Quran and Sunnah. The third step is measuring students' environmental literacy, attitudes and knowledge of environmental literacy in light of Quran and Sunnah. The fourth step is designing educational program consists of two units based on the last three steps. The fifth step is teaching this unit to the selected students and reevaluating their responses.

Results indicated the difference in the opinions of experts towards the environmental problems as well as their responses to environmental solutions and participation. There is obvious difference in students' scores in pre and post tests in the direction of the pre one. It was found out that teaching of the educational program improved students' environmental literacy in light of Quran and sunnah.

Key words: environmental literacy, educational program, Al Azhar curricula, secondary institutes and English, Quran and Sunnah

الملخص

يهدف هذا البحث إلى تحسين التنوير البيئي في ضوء القرآن والسنة النبوية من خلال تصميم برنامج في مناهج اللغة الإنجليزية للمرحلة الثانوية الأزهرية. لقد استوحيت الفكرة من خلال خبرتي في تدريس اللغة الإنجليزية لمدة خمسة عشرة عامًا ومسح لمناهج اللغة الإنجليزية الثانوية الأزهرية. ومن خلالهما وجدت أن المناهج لا تشمل على معلومات كافية عن معظم المشكلات البيئية المهمة. ومن ثم فقد توصلت إلى أنه يجب أن يكون هناك تركيزاً من جانب العملية التعليمية على المشكلات البيئية وذلك من خلال برنامج تعليمي مؤثر ذو فعالية قوية. لقد كرست الكثير من الدراسات السابقة في العقود القليلة الماضية جهودها إلى تحقيق التنوير البيئي من خلال التعليم.

دلت النتائج على تحسين مستوي الطلاب الاجتماهي والوعوي والتحصيلي الرقمي بعد تدريس البرنامج الدراسي السابق إعداده عن طريق البحث. حيث تم تطبيق التدريبات الفرضية المقترحة خلال الدراسة. وانضمت انه لا توجد

Issued by Environmental Studies and Researches Institute (ESRI), University of Sadat City
Introduction

The world is facing a number of social, economic, and environmental issues resulting from interactions of human activities with the global ecosystem. Environmental education, as a blueprint for the future, emerged in the 1970s in recognition of the rapidly escalating deterioration of the environment. It is now a part of education around the world, as human damage to the environment has become a major international issue.

In the Egyptian education system, from the primary to secondary levels, students are introduced to environmental issues through a range of core subjects. The content of curricula affect directly as well as on long run on the behavior and skills of students.

The Islamic perspective on the environment rests on the belief that Allah (swt) is the Creator and Sustainer of the universe. The whole universe along with all of its factors has been created with perfect wisdom (hikmah). The number, quantity, and quality of these factors are precisely determined by the divine plan. Each factor plays its ordained role, and everything created by Allah has a just purpose that must be fulfilled, where nothing is permanent here; everything exists for a fixed period. Yong people, the future decision makers, will be charged with important environmental issues, and in order to do so, it is imperative that they should be environmentally literate.

Allah has mocked the earth for man with all its natural resources clean. The relationship between man and the environment has evolved between positive and negative, and there have been no cumulative indicators in the environment indicating the weakness or collapse of the environment (Babtain 16: 2002). In spite of these environmental elements and the means given to man, the continuous and extensive pursuit of the elements of the environment has resulted in a biological and abiotic equilibrium in the environmental (Abu Erad ١٠٠:٢٠٠٥).

In reviewing the literature, the researcher found studies concerned with health and environmental risks in general. The study of (Ashkar 2011) indicated a low awareness of the dangers of agricultural chemicals in the students of the Faculty of Education. (El
Zahrani 2009) study in 2009 indicated the low awareness of students about the dangers of electronic waste. Al-Otaibi study 2006, which indicated the low level of environmental awareness of the risks of pollution inside the house and the study of Babtain 2002 which have reached the other level of low environmental awareness of some health and environmental risks. A study of Fiorino 1990, which indicated, that many people are not aware of the environmental risks, so their attitudes were negative towards them.

There are some educational studies that focused on the analysis and evaluation of curriculum development in the light of environmental and health risks such as the study of Helis 2010, which developed books of health and environment to help students to face environmental and health risks. Some studies also aimed at building programs or activities to develop environmental awareness about health and environmental hazards such as Zafer 2010 and Al-Hakimi 2004. The results showed the effectiveness of these activities and programs in developing environmental awareness about environmental and health risks.

Islam urged to preserve the environment through the Holy Quran and Sunnah and the approach of the righteous advances. Holy Quran verses recommended keep the earth (and do not mischief in the land spoilers) (Surat Al-Baqarah 60, Al Araf 74, Hood 85, Al Shoaraa 183 and el ankaboot 36).

As well as the text of the Quran on the most dangerous types of corruption is the destruction of plowing and offspring "and people you like to say in this life and God bears witness to what is in his heart and if he takes a quest in the land to destroy it and destroy plowing and offspring and God does not love corruption" (Surat al-Baqarah 204)

It is narrated from the hadeeths of the Noble Prophet (peace and blessings of Allaah be upon him) that he forbids corruption and corruption, and his call to preserve the water purely. "Do not let one of you idle in stagnant water and then wash it." Narrated by al-Bukhaari.

It was narrated that Abu Hurayrah (may Allaah be pleased with him) said: The Messenger of Allaah (peace and blessings of Allaah be upon him) said: "When a man walks along a path he finds a branch of fine thorns, thank Allah for him”.

Generally, there is a lack of environmental literacy studies. This lack is obviously appeared between Al-Azhar graduates. Although they are the advocates of Islam has to be interest in environmental issues and the keenness of Islam maintenance. This study is a type of survey research where the purpose is to describe environmentally literacy characteristics of Al Azhar secondary schools' English curricula based on Islamic perspectives in the light Holy Quran and Sunnah.

(Lee 2014; Segovia and Hardison 2009) tend to associate learner centred teaching with learners’ readiness, which is made possible by careful preparation. Also, it seems that most of the learning activities are led by the teacher and that their attempts to assist the students in doing the tasks are, to a large extent, different ways of getting them to reproduce fixed language (Nguyen 2007).
Statement of the Problem
The study tried to achieved the following aims:

1- To identify the reality of integrating environmental literacy in Al-Azhar Curriculum.
2- To determine the knowledge and skills required for Al-Azhar secondary school students in terms of environmental literacy.
3- To identify the basis of an English language program aimed at the development of Al-Azhar secondary school students' environmental literacy in light of Holy Quran and Sunnah.
4- To develop an English language program aimed at the development of Al-Azhar secondary school students' environmental literacy in light of Holy Quran and Sunnah.
5- To investigate the effectiveness of the suggested English language program in the development of Al-Azhar secondary school students' environmental literacy in light of Holy Quran and Sunnah?

Hypotheses of the study
In light of the questions of the study, the researcher tried to verify the following hypotheses:

1- There is no statistically significant difference between the average grades of the experimental group and control group students’ in the post-administration to environmental literacy test.
2- There is no significant statistical difference between the average grades of the experimental group and control group students’ in the post-administration to the environmental attitudes index.
3- There is no significant statistical difference between the average grades of the experimental group and control group students’ in the post-administration to the educational knowledge achievement test.

Participants of the Study
The student population of the present study is Al Azhar secondary school students in Egypt.). On average, they join these schools when they are 15 years old and finish their 3-year study when they are 15-18 years old. A sample of randomly selected students in participated in the present study. A total number of 78 were divided into two groups: an experimental group (41 students), and a control group (37 students). Moreover, sixty students of nonparticipant in the main sample were surveyed in the pilot study.

Instruments of the study
The following instruments were utilized to collect data:

1- An environmental literacy test.
2- An environmental attitude measure.
3- An achievement test.
Limitations of the study
The present study is limited to the following limitations:
1. Place and human limitations: the empirical study has been conducted on a sample of Al Azhar secondary school students at El-Sharkia governorate, Egypt.
2. Time Limitations: the suggested program has been implemented within the period 2016-2017 of the academic year 2017.
3. Subject limitations: This study is limited to examine the effectiveness of the suggested English language program in the development of Al-Azhar secondary school students' environmental literacy in light of Holy Quran and Sunnah.

Definition of Terms

Environmental education
Environmental education is defined as the aspect of education that aids citizens in becoming environmentally knowledgeable, and above all, are skilled and dedicated citizens who are willing to work, individually and collectively, toward achieving and/or maintaining a dynamic equilibrium between the quality of life and the quality of the environment (Hungerford, Peyton, & Wilke, 1980, p. 44).

Environmental literacy
Environmental literacy can be viewed as a basic functional education for all people, which provides them with the elementary knowledge, skills and motives to cope with environmental needs and contribute to sustainable development (Roth, 1992, p. 23).

Curriculum program
In the early years of the 20th century, the traditional concepts held of the "curriculum is that it is a body of subjects or subject matter prepared by the teachers for the students to learn." It was synonymous to the "course of study" and "syllabus". (Dewey, John 1902). Thus, curriculum can be viewed as a field of study. It is made up of its foundations (philosophical, historical, psychological, and social foundations); domains of knowledge as well as its research theories and principles. Curriculum is taken as scholarly and theoretical. It is concerned with broad historical, philosophical and social issues and academics. (Smith 1996)

Al-Azhar secondary school students
Al-Azhar secondary school students are the students of the stage after the basic education stage and consists of the tenth to twelfth grade where the student's age is between 15-18 years.

Data Analysis, Results and Discussion

Validity of the Environmental literacy Test:

A - Face validity
The test was presented to a set of jury members with expertise to identify to what extent the test is subjectively viewed as covering the concept it purports to measure. They were asked express their opinions and observations about the test and its subjects in terms of the appropriateness of the items and dimensions to the subject of the study, its validity in the disclosure of the information targeted for the study, as well as in terms
of the interdependence of each individual with the dimension to which it falls, and the clarity of the statement and the integrity of its wording, by modifying the words or inappropriate deletion of them or add what they see fit paragraphs, Consideration of the test are included, and other than the experts deem appropriate, and it may, the researcher calculates the coefficient arbitrators agreement and the introduction of the criteria described in table (2). In light of the opinions of the arbitrators of the test, the researcher modified some of the vocabulary.

Table (2): The criterion of sentence

| Ratio of agreement | Sentencing                      |
|--------------------|--------------------------------|
| accepted           | Agreement ratio up 80%         |
| modified           | Agreement ratio 70-80%         |
| canceled           | Agreement ratio less 70%       |

Table (3): Percentage of agreement of the arbitrators on the terms of the test of environmental literacy

| The dimension                  | Sentence No. | Repitation | percentage | Sentence No. | Repitation | percentage |
|--------------------------------|--------------|------------|------------|--------------|------------|------------|
| First: Environmental Resources | 1            | 1          | 100        | 7            | 7          | 90%        |
|                                | 2            | 1          | 100        | 8            | 8          | 100%       |
|                                | 3            | 1          | 100        | 9            | 9          | 100%       |
|                                | 4            | 1          | 100        |              |            |            |
| Second: Environmental Balance  | 1            | 1          | 100        |              |            |            |
|                                | 2            | 1          | 100        |              |            |            |
|                                | 3            | 1          | 100        |              |            |            |
|                                | 4            | 1          | 100        |              |            |            |
| Third: Environmental problems  | 1            | 1          | 100        |              |            |            |
|                                | 2            | 1          | 100        |              |            |            |
|                                | 3            | 1          | 100        |              |            |            |
|                                | 4            | 1          | 100        |              |            |            |

B- The discriminate validity

The researcher calculated the discriminate validity of the test by arranging the total score of the sample of the verification of the psychometric characteristics of the questionnaire (n = 60) in descending order. The significance of the differences was
calculated between the mean scores of the highest quartile grades (N = 15). The lowest quartile is lower the score in grades (n = 15) using the "Man - Whitney" test as shown in Table (4).

**Table (4):** Man - Whitney test results to detect the discriminant power of the environmental literacy test using a discriminate validity method

| The dimension               | The highest quadrature (n=15) | The lowest quadrature (n=15) | Z       | Statistical significance |
|-----------------------------|------------------------------|----------------------------|---------|-------------------------|
|                             | Averag e grade | Total grade | Averag e grade | Total grade |         |                       |
| First: Environmental Resources | ١٣   | ٣٩٠       | ٨     | ١٣٦       | ٣٣٫ ٥ (١٠٫٠ ٣٢ ٠٩٣ ٨ ٦٣١ ٦) | (**,•,•) |
| Second: Environmental Balance | ١٣   | ٣٩٠       | ٨     | ١٣٦       | ٥١٫٥ (١٠٫٠ ٣٢ ٠٨٣ ٨ ٦٣١ ٤) | (**,•,•) |
| Third: Environmental problems | ١٣   | ٣٩٠       | ٨     | ١٣٦       | ٥٢٫٣ (١٠٫٠ ٣٢ ٠٩٣ ٨ ٦٣١ ٤) | (**,•,•) |

Results presented in table (4) reveals that the dimensions of the test have the discriminatory force, where it was able to distinguish between the upper level and the lower level in grades as expressed by the significance of the value of "Z" calculated for the differences between the scores of the highest quartile and quartile quartile on the questionnaire (N = 15 each) ; Which gives good indication of the discriminatory ability of the test as a good indicator of honesty.

**Second: Reliability of the test**

A: Internal consistency of the test

The internal consistency of the test was calculated by calculating the correlation coefficients between the scores of the survey sample on the test terms and their total scores on the dimension to which they belong. Table (5), (6) show the results of the internal consistency of the test as follows:

**Table (5) Correlation coefficients between the degree of each sentence and the total degree of each dimension of the test of environmental literacy**

| The dimension | Sentenc e No. | Correlatio n Coefficien t | Statistical significan ce | Sentenc e No. | Correlatio n Coefficien t | Statistical significan ce |
|---------------|---------------|----------------------------|---------------------------|---------------|----------------------------|---------------------------|
### Table (6) Correlation coefficients between the degree of each dimension of the test and its total score.

| The dimension                  | Correlation Coefficient | Statistical significance | The dimension                  | Correlation Coefficient | Statistical significance |
|--------------------------------|-------------------------|--------------------------|--------------------------------|-------------------------|--------------------------|
| First: Environmental Resources | ٦٣٨٫٠ (١٠٫٠)            | (١٠٫٠)                  | Second: Environmental Balance  | ٦١٧٫٠ (١٠٫٠)            | (١٠٫٠)                  |
| Third: Environmental problems  | ٦٦٧٫٠ (١٠٫٠)            | (١٠٫٠)                  |                                |                         |                          |

From the table (5), (6) we find that there are significant statistical correlation between the scores of the students of the survey sample to test the vocabulary of the test and the total score on the dimension to which they belong, all of them D. at the level of significance (٠.٠١), which is an indicator of internal consistency.

### B - Reliability test:

The test was validated using the test-retest method by applying it to the sample of non-participants in the basic sample of the study. The coefficient of correlation between the students' grades in the first and second application was calculated by a two-week
interval using "Pearson" (Ali Khattab, 2003), the results are as shown in the following table:

Table (7): Correlation coefficients between the first and second application of the test (n = 60)

| The dimension                        | Correlation Coefficient | Statistical significance |
|--------------------------------------|-------------------------|--------------------------|
| First: Environmental Resources      | ٣١٣ (١٠٫٠)             | (. , .)                  |
| Second: Environmental Balance       | ٣١٣ (١٠٫٠)             | (. , .)                  |
| Third: Environmental problems       | ٣١٣ (١٠٫٠)             | (. , .)                  |
| Total degree                        | ٣١٣ (١٠٫٠)             | (. , .)                  |

It is clear from the table that all correlation coefficients between students' scores in the first and second application of the questionnaire (as a total and as sub-dimensions) were positive and function at the mean level (0.01). The correlation coefficients ranged between (0.689) and (0.785) indicating that the test has a high degree of reliability.

Second: Environmental attitude measure:
First: validity of scale
a-The face validity.

The validity of the test was calculated using the Face validity by presenting it to a group of arbitrators with the expertise to perform its arbitration. The judges have been briefed on the title of the study, its questions and objectives to express their views and observations about the scale, The appropriateness of the words and the dimensions of the subject of the study, and its validity in the disclosure of the information targeted for the study, as well as in terms of the interdependence of each individual by the dimension to which it falls, and the clarity of the statement and the integrity of its wording, by modifying the words or inappropriate deletion of them or add what they see fit paragraphs, Consider the scale of the scale, etc., which the experts deem appropriate

Table (8): Percentage of the agreement of the arbitrators on the items of the environmental attitude measure.

| The dimension                          | Sentence No. | Repitation | Percent | Sentence No. | Repitation | Percent |
|----------------------------------------|--------------|------------|---------|--------------|------------|---------|
| Environment Attitude Test             | ٣ ٦          | %٠٠١      | ٧ ٦     | %٠٠١      |            |         |
|                                        | ٣ ٦          | %٠٠١      | ٧ ٦     | %٠٠١      |            |         |
|                                        | ٣ ٦          | %٠٠١      | ٧ ٦     | %٠٠١      |            |         |
In light of the opinions of the arbitrators of the scale, the researcher modified some vocabularies.

**B- The discriminate validity:**

The researcher calculated the discriminate validity of the scale by arranging the total score of the sample of the verification of the psychometric characteristics of the questionnaire (n = 60) in descending order. The significance of the differences was calculated between the mean scores of the highest quadratic degrees, the highest point in the scores (N = 15) Lower the score in grades (n = 15) using the Mann-Whitney test as shown in Table (9).

Table (9): Man - Whitney test results to detect the discriminatory power of the environmental attitudes scale using the terminal comparison method

| The dimension | The highest quadrature (n=15) | The lowest quadrature (n=15) | Z | Statistical significance |
|---------------|-----------------------------|----------------------------|---|------------------------|
| Environmental attitude measure | 22 | 39.3 | 8 | 136 | 5.116 | (.0,01) |

It is clear from the table (9) that the measure has the discriminant power, where it can distinguish between the upper and lower levels in the grades. The significance of the Z value for the differences between the scores of the highest and lowest quadratic groups on the scale (n = 15 each) Gives good indication of the discriminatory ability of the scale as a good indicator of honesty.

**Second: Reliability of the scale:**

**A. Internal consistency of the scale:**

The internal consistency of the scale was calculated by calculating the correlation coefficients between the scores of the sample of the survey sample on the terms of the scale and the total score of the scale. Table (10) shows the results of the internal consistency of the scale as follows:

**Table (10) Correlation coefficients between the score of each statement and the total score of the environmental trends index**
From the table (10) we find that there are significant statistical correlations between the scores of the students of the survey sample of the scale on the vocabulary of the scale and the total score on the dimension to which they belong, all of them at the level of significance (0.01), which is an indicator of the internal consistency of the scale.

**B - Reliability test:**

The standard of measurement was verified using the test-retest method by applying it to non-participants in the basic sample of the study. The coefficient of correlation between students' scores in the first and second applications was calculated by a two-week interval using "simple correlation at Pearson "(Ali Khatab, 2003). The correlation coefficient (0.824), which is a high value and statistical function, indicates that the index has a high degree of reliability.

**Third: Achievement test:**

**First: The validity of the test:**

**A - Face validity:**

The validity of the test was calculated using the face validity by presenting it to a group of arbitrators with the expertise and expertise to perform the arbitration. The judges are informed of the title of the study, its questions and objectives, to express their opinions and observations about the test and its subjects and terms in terms of the appropriateness of the words and the dimensions of the subject of the study, and its validity in the disclosure of the information targeted for the study, as well as in terms of the interdependence of each individual with the dimension to which it falls, and the clarity of the statement and the integrity of its wording, by modifying the words or

| Sentene No. | Correlation coefficient | Statistical significance | Sentene No. | Correlation coefficient | Statistical significance |
|-------------|-------------------------|--------------------------|-------------|-------------------------|--------------------------|
| 1           | 0.589                  | (.01)                    | 2           | 0.597                  | (.01)                    |
| 3           | 0.687                  | (.01)                    | 4           | 0.628                  | (.01)                    |
| 5           | 0.583                  | (.01)                    | 6           | 0.776                  | (.01)                    |
| 7           | 0.637                  | (.01)                    | 8           | 0.811                  | (.01)                    |
| 9           | 0.654                  | (.01)                    | 10          | 0.737                  | (.01)                    |
| 11          | 0.738                  | (.01)                    | 12          | 0.742                  | (.01)                    |
| 13          | 0.667                  | (.01)                    | 14          | 0.705                  | (.01)                    |
| 15          | 0.653                  | (.01)                    |             |                         |                          |

From the table (10) we find that there are significant statistical correlations between the scores of the students of the survey sample of the scale on the vocabulary of the scale and the total score on the dimension to which they belong, all of them at the level of significance (0.01), which is an indicator of the internal consistency of the scale.

**B - Reliability test:**

The standard of measurement was verified using the test-retest method by applying it to non-participants in the basic sample of the study. The coefficient of correlation between students' scores in the first and second applications was calculated by a two-week interval using "simple correlation at Pearson "(Ali Khatab, 2003). The correlation coefficient (0.824), which is a high value and statistical function, indicates that the index has a high degree of reliability.

**Third: Achievement test:**

**First: The validity of the test:**

**A - Face validity:**

The validity of the test was calculated using the face validity by presenting it to a group of arbitrators with the expertise and expertise to perform the arbitration. The judges are informed of the title of the study, its questions and objectives, to express their opinions and observations about the test and its subjects and terms in terms of the appropriateness of the words and the dimensions of the subject of the study, and its validity in the disclosure of the information targeted for the study, as well as in terms of the interdependence of each individual with the dimension to which it falls, and the clarity of the statement and the integrity of its wording, by modifying the words or
inappropriate deletion of them or add what they see fit paragraphs. Consideration of the test are included, and other than the experts deem appropriate, and it may, the researcher calculates the coefficient arbitrators agreement and the introduction of the criteria described in the Table: (11)

**Table (11): The criterion of sentence**

| Ratio of agreement | Sentencing                  |
|--------------------|-----------------------------|
| accepted           | Agreement ratio up 80%      |
| modified           | Agreement ratio 70-80%      |
| canceled           | Agreement ratio less 70%    |

Table (12): Percentage of agreement of the arbitrators on the terms of the achievement test

| The dimension       | Sentences No. | Repitiation | percentage | Sentence No. | Repitiation | percentage |
|---------------------|---------------|-------------|------------|--------------|-------------|------------|
| First group of questions | 1             | 6           | 100        | 2            | 7           | 100        |
|                     | 3             | 6           | 100        | 4            | 7           | 100        |
|                     | 5             | 6           | 70% ,50,33 | 8            | 7           | 100        |
|                     | 7             | 6           | 100        | 8            | 10          | 100        |
|                     | 9             | 6           | 100        |              | 10          | 100        |
| Second group of questions | 1             | 6           | 100        | 3            | 6           | 60% ,33    |
|                     | 3             | 6           | 80% ,33    | 4            | 7           | 100        |
|                     | 5             | 6           | 100        | 6            | 7           | 100        |
|                     | 7             | 6           | 100        | 8            | 10          | 100        |
|                     | 9             | 6           | 100        |              | 10          | 100        |
| Third group of questions | 1             | 6           | 100        | 3            | 6           | 100        |
|                     | 3             | 6           | 100        | 4            | 7           | 100        |
|                     | 5             | 6           | 80% ,33    | 6            | 7           | 100        |
|                     | 7             | 6           | 100        |              | 10          | 100        |

In light of the opinions of the arbitrators of the test, the researcher modified some of the vocabulary.

**B- The discriminate validity:**

The researcher calculated the discriminate validity of the test by arranging the total score of the sample of the verification of the psychometric characteristics of the questionnaire (n = 60) in descending order. The significance of the differences was calculated between the mean scores of the highest quartile grades (N = 15). The lowest quartile is lower the score in grades (n = 15) using the "Man - Whitney" test as shown in Table (13).
Table (13): Man - Whitney test results to detect the discriminant power of the achievement test using a discriminate validity method

| The dimension            | The highest quadrature (n=15) | The lowest quadrature (n=15) | Z       | Statistical significance |
|-------------------------|-------------------------------|-----------------------------|---------|-------------------------|
|                         | Average grade | Total grade | Average grade | Total grade |                  |
| First group of questions | 48      | 776         | 16     | 276       | 5.124   | (0.01) |
| Second group of questions | 48      | 776         | 16     | 276       | 5.236   | (0.01) |
| Third group of questions  | 48      | 776         | 16     | 276       | 5.104   | (0.01) |

It is clear from the table (13) that the dimensions of the test have the discriminatory force, where it was able to distinguish between the upper level and the lower level in grades as expressed by the significance of the value of "Z" calculated for the differences between the scores of the highest quartile and quartile quartile on the test (N = 15 each) ; Which gives good indication of the discriminatory ability of the test as a good indicator of honesty.

Second: Reliability of the test:

A: Internal consistency of the test:

The internal consistency of the test was calculated by calculating the correlation coefficients between the scores of the survey sample on the test terms and their total scores on the dimension to which they belong. Table (14), (15) show the results of the internal consistency of the test as follows:

Table (14) Correlation coefficients between the degree of each sentence and the total degree of each dimension of the achievement test

| The dimension            | Sentenc e No. | Correlation Coefficient | Statistical significanc e | Sentenc e No. | Correlation Coefficient | Statistical significanc e |
|-------------------------|--------------|-------------------------|-------------------------|--------------|-------------------------|-------------------------|
|                         |              |                         |                         |              |                         |                         |
| First group of questions |              |                         |                         |              |                         |                         |
|                         | 1            | 0.666                   | (0.01)                  | 2            | 0.547                   | (0.01)                  |
|                         | 3            | 0.680                   | (0.01)                  | 4            | 0.619                   | (0.01)                  |
|                         | 5            | 0.717                   | (0.01)                  | 6            | 0.419                   | (0.01)                  |
|                         | 7            | 0.556                   | (0.01)                  | 8            | 0.514                   | (0.01)                  |
|                         | 9            | 0.747                   | (0.01)                  | 10           | 0.675                   | (0.01)                  |
| Second group of questions |              |                         |                         |              |                         |                         |
|                         | 1            | 0.583                   | (0.01)                  | 2            | 0.654                   | (0.01)                  |
|                         | 3            | 0.662                   | (0.01)                  | 4            | 0.815                   | (0.01)                  |

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Table (15) Correlation coefficients between the degree of each dimension of the test and its total score.

| The dimension | Correlation Coefficient | Statistical significance | Correlation Coefficient | Statistical significance |
|---------------|-------------------------|--------------------------|-------------------------|--------------------------|
| of questions  | ٦٠٩٫٠ (١٠٫٠)            | ٧ ٦٦٧٫٠ (٠٫٠)           | ٨ ٢١٧٫٠ (٠٫٠)           |                         |

Table (16): Correlation coefficients between the first and second application of the test (n = 60)

| The dimension         | Correlation Coefficient | Statistical significance |
|-----------------------|-------------------------|--------------------------|
| First group of questions | ٦٠٩٫٠ (٠٫٠)           |                         |

From the table (14), (15) we find that there are significant statistical correlation between the scores of the students of the survey sample to test the vocabulary of the test and the total score on the dimension to which they belong, all of them D. at the level of significance (0.01), which is an indicator of internal consistency.

B - Reliability test:

The test was validated using the test-retest method by applying it to the sample of non-participants in the basic sample of the study. The coefficient of correlation between the students' grades in the first and second application was calculated by a two-week interval using "Pearson "(Ali Khattab, 2003), the results are as shown in the following table:

Table (16): Correlation coefficients between the first and second application of the test (n = 60)
It is clear from the table that all correlation coefficients between students' scores in the first and second application of the test (as a total and as sub-dimensions) were positive and function at the mean level (0.01). The correlation coefficients ranged between (0.689) and (0.785) indicating that the test has a high degree of reliability.

**Fifth: Ensuring the equality of groups:**

The researcher verified the parity of the experimental and control groups by conducting a T test for two independent samples using the Statistical Package for Social Sciences (SPSS) version 22, indicating that there were no statistically significant differences between the mean scores of the experimental and control groups in the application Tribal instruments for study on the equivalence of totality. The results are as follows:

Results presented in table 19 show that:
- There were no statistically significant differences between the average scores of the experimental and control groups in the pre-application of the first dimension to the environmental literacy test (environmental resources).
- There were no statistically significant differences between the average scores of the experimental and control groups in the pre-application of the second dimension to the environmental literacy test (environmental balance).
- There were no statistically significant differences between the average scores of the experimental and control groups in the pre-application of the third dimension of the environmental literacy test (environmental problems).
- There were no statistically significant differences between the average scores of the experimental and control groups in the pre-application to environmental literacy test as a total.
- There were no statistically significant differences between the average scores of the experimental and control groups in the pre application of the environmental attitude scale.
- There were no statistically significant differences between the average scores of the experimental and control groups in the pre application of the educational knowledge achievement test.

These results indicate the equivalence between the experimental and control groups in the three dependent variables taken into account in the current study.

**Table (17) T test results to indicate the differences between the average scores of**
students in the pre-application to the environmental literacy test, the environmental attitude scale and educational achievement test.

| The tool                        | Group            | Number | Mean     | Standard deviation | Freedom | T value | Statistical significance |
|--------------------------------|------------------|--------|----------|--------------------|---------|---------|-------------------------|
| Environmental literacy test    | Experimenterial  | 41     | 4.976    | 1.32               | 76      | 0.960   | Not statistically       |
|                                | Control          | 37     | 4.739    | 1.36               |         |         |                         |
| Environmental resources        | Experimenterial  | 41     | 0.195    | 1.47               | 76      | 0.888   | Not statistically       |
|                                | Control          | 37     | 4.966    | 1.35               |         |         |                         |
| Environmental balance          | Experimenterial  | 41     | 4.888    | 1.53               | 76      | 0.709   | Not statistically       |
|                                | Control          | 37     | 4.341    | 1.52               |         |         |                         |
| Environmental problems         | Experimenterial  | 41     | 1.259    | 1.98               | 76      | 0.662   | Not statistically       |
|                                | Control          | 37     | 1.252    | 1.91               |         |         |                         |
| Total degree                   | Experimenterial  | 41     | 0.224    | 0.72               | 76      | 0.432   | Not statistically       |
|                                | Control          | 37     | 0.217    | 0.73               |         |         |                         |
| Environmental attitude scale   | Experimenterial  | 41     | 0.272    | 0.84               | 76      | 0.042   | Not statistically       |
|                                | Control          | 37     | 0.269    | 0.83               |         |         |                         |
| Educational achievement test   | Experimenterial  | 37     | 0.545    | 0.94               | 76      | 0.203   | Not statistically       |
|                                | Control          | 41     | 0.562    | 0.97               |         |         |                         |

This study will increase the vocabularies of foreigners’ communication. The knowledge of academic vocabulary is crucial for educational success, and recently there has been a push amongst teachers and researchers to assist students at the pretertiary level to develop their disciplinary literacy and understanding of how academic English varies across disciplines. Vocabulary is a vital component of educational success in both
first and second language contexts (Webb & Nation, 2017), and in English for Academic Purposes (EAP) pedagogical materials to facilitate instructed vocabulary acquisition have been the focus of much research; in particular, advanced methods have developed for producing corpus-informed wordlists (Gardner & Davies, 2014; Lei & Liu, 2016).

Conclusions: In the present study the attempt was made to investigate the effectiveness of the suggested English language program in the development of Al-Azhar secondary school students' environmental literacy in light of Holy Quran and Sunnah. The previous studies conducted on environmental literacy shows that study on this topic is still in its infancy. The present study in turn tries to fill in this gap by developing a suggested English language program for enhancing the teaching of environmental literacy for Al-Azhar secondary school students.

Recommendations: we recommended, the necessity of overlapping Islamic values with environmental education, awareness, literacy; in local community in all educational curricula to fulfill the needs of human resources, creating good decision makers and Advocates of Islam over all the worlds in the nearest future.

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