Abstract
Environmental sensitivity is considered to be one of the most important factors in responsible environmental behaviours, and is defined as an ability to accept the feeling or stimuli brought about by environments. This factor has different characteristics from knowledge, skills or values. For the formation of responsible environmental behaviours, a special strategy is needed to promote environmental sensitivity. The aim of this study is to apply a teaching strategy developed by Park and Chang (1998), to investigate its applicability to our local situation to foster environmental sensitivity and to verify its effects. The teaching strategy as developed by Park and Chang (1998), was based on the principles of humanistic education and the key points were focused on feeling environments through the body and confronting the present by examining “here and now” situations. This strategy was applied to an experimental group where instruction was given on four environmental issues. According to the results some vital factors were revealed. Firstly, the number of students who stated their feelings correctly after the post-test for the experimental group increased by 15% - 32% per issue; secondly the intensity of feelings was stronger. Thirdly, the feelings expressed became more varied with a significant percentage of about 35.4 expressing disgust for the first environmental issue, 23.5% expressing hope for the second environmental issue. In the case of the third environmental issue 36.5% expressed disgust while 36.5% expressed surprise for the fourth environmental issue. Therefore, this strategy is helpful in promoting environmental sensitivity.

Key Words: Environmental sensitivity, environmental behaviours, teaching strategy, humanistic education, experimental group.

Introduction
In these environmentally conscious times, most people agree that we need to be environmentally responsible. Toxic waste contaminates groundwater; oil spills destroy aquatic fauna and flora. Burning of fossil fuels produce carbon dioxide, thus, adding to global warming, man’s activities in agricultural practices and urbanization devastate land resources through soil erosion and biodiversity loss.

The main goal of environmental education (EE) research is to teach, sensitizes and create awareness in man, to be concerned primarily about the environment (Enger and Smith, 2004). In the past, researches in EE have concentrated on individualism and behaviourism (Robottorm and Hart, 1995). Currently, studies in EE have focused on environmentalism and instrumentalism. These systems of ideas have become the main currency, as well as the Philosophies underlying modem environmental education. Consequently, the role of current research in EE is also the formation of responsible environmental behaviours.

Environmental issues require a consideration of ethics and morals. Environmental ethics focuses on the moral foundation of environmental responsibility and how far this responsibility extends. There are three primary theories of moral responsibility regarding the environment, these are:

* Environmental anthropocentrism or human-centred theory, which is of the view that all environmental responsibility is derived from human interests alone.

* Environmental biocentrism or life-centred theory, which is of the view that all forms of life have an inherent right to exist.

* Environmental ecocentrism or ecosystem-centred theory, is of the view that the environment deserves direct moral consideration and not one that is merely derived from human interests. In ecocentrism, it is suggested that the environment has direct rights, that it qualifies for moral personhood, that it is deserving of a direct duty, and that it is has inherent worth. The environment, by itself is considered to be on a moral par with humans.
Although each supports environmental responsibility, their approaches are different.

It is the intention in this paper to investigate how environmental sensitivity could be enhanced using a teaching strategy that is designed to examine feelings, physical affection and values about certain environmental issues. The lecturer’s aim in this new teaching strategy is to bridge the gap between the affective domain and cognitive information in a harmonious manner.

**Problem Statement**

The main problem that prompted this study was the observed lack of responsible attitude to the environment. The general lack of concern towards environmental degradation and deterioration by people, is displayed by their methods of waste disposal, indiscriminate and extensive clearing of vegetation, methods of engineering practices without regard to ecological integrity, poor farming methods, over-abstraction of ground and surface water resources, careless use and disposal of toxic substances and so on. People are only concerned when faced directly by the problem. These environmental problems prompted this study.

**Purpose of the Study**

The aim of this research is to foster environmental sensitivity with a view to enhancing responsible environmental behaviours toward the environment.

**Research Questions**

The general lack of feeling or high degree of insensitivity perceived by the researcher prompted the following pertinent questions to be asked:

- What do you feel about your ambient environment?
- What do you feel about the extent of environmental degradation such as soil erosion, waste proliferation, in your environment?
- What is your attitude towards the despoliation of your environment?

**Conceptual Issues**

According to Sie, Hungerford and Tomera (1984), the main goal of EE research is to identify the set of significant variables that predict environmental behaviours. They are:

- level of environmental sensitivity
- perceived knowledge of environmental action strategies
- perceived skill in using environmental action strategies
- psychological sex - role classification
- individual locus of control
- group locus of control
- attitude towards pollution

“Attitude” is considered as one of the most important influences on responsible environmental behaviours (Ramsey and Rickson, 1976; Hines Hungerford and Tomera, 1986; Hungerford and Volk, 1990). Environmental attitude is defined as “an enduring positive or negative feeling about some object or issue (affective domain) (Nancy, 1994). Some researchers have described attitude as a construct of a cognitive, an affective and conative component (Borden and Schettino, 1979). There are many different attitudes about the environment, most of which fall under one of three headings:

- the developmental attitude
- the preservation attitude
- the conservation attitude.

Each of these attitudes has its own code of conduct against which environmental responsibility can be measured.

- Developmental attitude is based on individualism or egocentrism. It assumes that the human race is and should be the master of nature and that the Earth and its resources exist for our benefit and pleasure.
- Preservation attitude emanates from the preservation ethical viewpoint, which considers nature as special in itself. It is argued by the preservationists, that nature has
intrinsic value or inherent worth apart from human appropriation. Whatever is the reason for wanting to preserve nature, it is borne out of the responsibility humans owe the environment.

* Conservation or Management attitude. It is related to the scientific preservationist view but extends the rational consideration to the entire Earth and for all time. It recognizes the desirability for decent living standards, but it works towards a balance of resources-use and resource availability. The conservation attitude stresses a balance between total development and absolute preservation.

‘Sensitivity’ is defined as “characteristics or abilities to accept certain stimuli or feeling”. It is defined as “the interests, receptivities or the concentrating power of attention for concrete or abstract objects” It is included in what is called “awareness”. Based on its conceptual properties, environmental sensitivity is an essential factor in forming attitudes about environments and provides a motive for the acquisition of environmental knowledge. Therefore, concern for and understanding of this factor are necessary prerequisites.

However, environmental sensitivity has not been considered in formal education and research relating to it is rare. In this study, the focus is to develop a teaching strategy to foster environmental sensitivity, which is presumed to be the main factor involved in forming responsible environmental behaviours, and also to verify the effects of this strategy.

Method
This section discusses the method applied for the study. The section is discussed under three subheadings, namely study population, sample and sampling technique; method of data collection, instrument for data collection and the development of the new strategy. This study investigated the characteristics of environmental sensitivity and a new strategy to promote it was developed following the work of Park and Chang (1998). Four topics were selected for instruction. These topics were:

* Destruction of land resources by soil erosion.
* Problems of biodiversity loss,
* Problems of waste management,
* Destruction of the Ozone layer.

These issues are very serious and of worldwide importance.

Study Population, Sample and Sampling Technique
Secondary Schools in Enugu South Local Government Area (LGA) comprised the study population. Only girls were selected for the study, this was because of their different reactions or sensitivity levels to these environmental issues. The Girls’ Anglican Grammar School, Awkunanaw, Enugu, was randomly selected for the study. The choice of Senior Secondary One (SSI) students was based on judgmental sampling method by the author.

The study involved two groups, namely the experimental and control groups. These comprised two classes. The sample size for each group was done using the Bourley’s formula. The formula is given as follows:

\[ S = \frac{N}{1 + N(e)^2} \]

where

$S$ is the sample size, $N$ is the population size, 1 is the theoretical constant and $e$ is the margin of error assumed. For this study an error margin of 5% is assumed. With a total of 215 girls in the entire SS 1 and applying the Bourley’s formula, seventy (70) secondary school girls were selected for each group making a total of 140. The sampling technique employed to select the one hundred and forty girls used for the experimental and control group was based on random sampling technique using the lucky-deep method. The experimental design to compare the degrees of environmental sensitivity was as follows:

```
O1  O2  O24
X2  O2  O2
```
Method/ Instrument of Data Collection

The newly developed strategy was applied only to the experimental group and not the control group. Pre-tests for the two groups were conducted in June, 2006. After two weeks the author instructed two classes of students from the experimental group (2 lectures of 2hrs each by 4 topics = 16 lecture hours). At the end of the entire lectures, post-test were conducted and both the results of the pre-test and post-test were compared. Pre-and post-test were targeted at the problem of identifying the degree of environmental sensitivity involved in the four environmental issues enlisted. The Likert scale is appropriate for quantitatively measuring the difference in feelings about environments, while the writing type is suitable for measuring intensity or variety of feelings. Writing about one’s feelings is meaningful in that it can give a person an opportunity to describe his or her own feelings correctly. Thus, this study developed the writing type items.

To verify these effects, the researcher conducted lectures on the four environmental topics by using the new strategy and so analyzed the pre- and post-test results. The findings are presented in percentages and discussed accordingly.

The Development of the New Strategy

This new strategy of learning is one which inculcates ‘feeling’ in the teaching and learning process. It is based on the concept of the “humanistic education for the whole man” (Lyon, 1990). The humanistic educators emphasize affection-stressed instruction for love, sympathy, cognition, fantasy and so on. The educational goal is “training of the whole man, both intellectually and emotionally. For this reason, they interest themselves in this factor of sensitivity.

“Learning to feel” and “feeling to learn” are emphasized for sensitivity training. Communication and problem-solving are especially stressed for the exchange of information among members (George and Alan, 1991). Open and honest feedback is needed and new leadership is required to help the flow of information among members. Above all, the cognitive domain and the affective domain (love and sympathy about environments, etc) must be stressed equally in environmental education. Therefore, various strategies related to sensitivity must be referred to. As already mentioned, environmental sensitivity is defined as “an ability to accept feelings or stimuli about environments”. So, first of all, the lecturer (researcher) must create the conditions conducive to the students evoking their feelings and stimuli about environments, increasing the chances of them doing so, and help students to check their changes in sensitivity through activities causing a shift of feelings in accordance to the time and place.

The most important aspect of the training is to release physical tension from the body. Students cannot perceive surrounding objects or Nature until they can perceive themselves correctly. Learners express their feelings in language or non-language forms and can materialize them when they experience feelings and stimuli about these objects. The lecturer expresses his/her feelings in words or writings. Moreover, he/she must not omit the non-language format such as body language. This new teaching-learning strategy for environmental sensitivity is based on these various subject matter. This strategy is adapted after Park and Chang (1998) and modified to suit our local environment. The characteristics of each stage are as follows:

Stage I: Relaxation (reducing physical tension and fatigue)

The first stage of this strategy, involved the training to alleviate student’s fatigue and increase their ability perceive through the body. Most students cannot understand other objects through the body because they have been exhausted by many intellectual activities. Thus, the lecturer should create a comfortable lecture-room environment to ease tension. This could be done by conducting the students through deep breathing exercises by contraction and relaxation of the purse-lip diaphragm or abdomen and by inducing comfortable conditions so that the students move the body with the help of smooth classical music.
Enhancing Environmental Sensitivity Through the Development of a Teaching Strategy

Stage II: Sensitivity Diagnosis I (feeling here - and - now situations: examining the present I)
This stage is designed to examine physical affection, feelings and values of the present through a relaxed body. The students are supposed to write “what they feel about certain environmental issues” and find out their feelings about perception of the present environmental issues and to solve the problems of the present.” This is the Pre-test stage.

State III: Learning Activity with Sensitivity Training
In this stage, the lecturer conducts the teaching and learning activity about environmental issues including communication and problem-solving. The lecturer assists the students in bridging the gap between the affective domain and cognitive information in a harmonious manner. Then he directs an honest feedback process with flexibility, openness and effectiveness among the members. Real communication takes place among the members and they mutually discover their hidden sensitivity in the course of the learning activity.

Stage IV: Sensitivity Diagnosis II (feeling here - and - now situations: examining the present II)
In the last stage, students examine their changed affections, feelings and values again in here-and-now situations. They also perceive the present by writing “what they feel about certain environmental issues” and “find out their feelings about perception of these environmental issues after they have been conducted through the teaching and learning activity, and how to solve the problems of the present”. This is the post-test stage. A comparison is then made between their previous feelings and affections of Stage 2 and that of Stage 4. Figure 1 illustrates the new teaching strategy for environmental sensitivity.

Stage 1
Relaxation (reducing physical tension and fatigue)

Stage 2
Sensitivity Diagnosis of the Present I (feeling the here-and-now situation I: examining the present I)

Stage 3
Learning Activity with Sensitivity Training

Stage 4
Sensitivity Diagnosis of the Present II (feeling the here-and-now situation II: examining the present II)

Fig. 1: Flow diagram of the teaching strategy (adapted after Park and Chang, 1998 and applied to SSI students of Anglican Girls Grammer School, Enugu, 2005)

Findings from Verification of the New Strategy
The two groups, comprising of control and experimental, of 140 SSI students of Anglican Girls Grammar School Enugu, were informed about the environmental issues to verify the effects of the developed strategy, and their statements were analysed with the pre-and post -tests. The issues examined were categorized into three:
1. Did the students state their feelings correctly?
Weren’t they confusing their feelings with knowledge, information, values and "thoughts?"

2. How strong were their feeling?

3. What kinds of feelings were they?

With these three basic questions, the statements of the control and experimental groups were analyzed. Table 1, shows the percentage of feelings, thoughts, values and knowledge about environmental issues.

Table 1: Percentage Responses on Feeling, Thought, Value Decision and Knowledge for Four Environmental Issues

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Group</th>
<th>Test</th>
<th>Feeling (%)</th>
<th>Thought (%)</th>
<th>Values (%)</th>
<th>Knowledge (%)</th>
<th>No answer (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destruction of Land Resources by erosion</td>
<td>C</td>
<td>Pre-post</td>
<td>10.8</td>
<td>59.6</td>
<td>16.7</td>
<td>5.3</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.8</td>
<td>59.8</td>
<td>16.5</td>
<td>5.1</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.1</td>
<td>59.7</td>
<td>15.5</td>
<td>6.3</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>Pre-post</td>
<td>33.2</td>
<td>48.2</td>
<td>11.9</td>
<td>3.1</td>
<td>3.6</td>
</tr>
<tr>
<td>Problem of Biodiversity Loss</td>
<td>C</td>
<td>Pre-post</td>
<td>13.8</td>
<td>63.5</td>
<td>13.6</td>
<td>2.4</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13.9</td>
<td>63.7</td>
<td>13.7</td>
<td>2.3</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>Pre-post</td>
<td>13.8</td>
<td>62.4</td>
<td>13.8</td>
<td>1.3</td>
<td>8.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>28.5</td>
<td>51.9</td>
<td>14.5</td>
<td>3.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Problem of Waste Management</td>
<td>C</td>
<td>Pre-post</td>
<td>14.7</td>
<td>59.6</td>
<td>12.8</td>
<td>3.9</td>
<td>9.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>14.5</td>
<td>59.8</td>
<td>12.7</td>
<td>3.2</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>Pre-post</td>
<td>13.5</td>
<td>59.7</td>
<td>14.1</td>
<td>4.3</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>45.6</td>
<td>38.2</td>
<td>10.4</td>
<td>4.2</td>
<td>4.6</td>
</tr>
<tr>
<td>Destruction of the Ozone Layer</td>
<td>C</td>
<td>Pre-post</td>
<td>12.4</td>
<td>67.8</td>
<td>9.3</td>
<td>4.6</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.8</td>
<td>67.8</td>
<td>9.4</td>
<td>4.9</td>
<td>5.8</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>Pre-post</td>
<td>12.3</td>
<td>64.3</td>
<td>10.8</td>
<td>6.5</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>36.6</td>
<td>48.7</td>
<td>8.2</td>
<td>4.1</td>
<td>2.4</td>
</tr>
</tbody>
</table>

C - control group
E- Experimental group

Source: Authors Experimental Application

In Table 1, the students did not exactly understand the concept of “feeling” and were confusing their feelings with thought or value decisions. The analyzed results of the first issue (destruction of land resources by soil erosion), were as follows:

In the pre-test and post-test of the control group and the pre-test of the experimental group, 59.6%, 59.8% and 59.7% of the students, respectively, described the contents of thought instead of feelings; 16.7%, 16.5% and 15.5% of them described the contents of value decisions, and only 10.8%, 10.8% and 12.1% described their feelings.

From the results of the second environmental issue - problems of biodiversity loss; in the pre-test and post-test of the control group and the pre-test of experimental group, 63.5%, 63.7% and 62.4%, respectively, described the contents of thought instead of feelings; 13.6%, 13.7% and 13.8% described the content of value decisions, and only 13.8%, 13.9% and 13.8% respectively, described their feelings.

From the results of the third environmental issue - problems of waste management; 59.6%, 59.8%, and 59.7% respectively, described the contents of thought instead of feelings, 12.8%, 12.7% and 14.1% described the contents of value decisions and only 14.7, 14.5% and 13.5% described their feelings.

From the results of the fourth environmental issue - Destruction of the ozone layer; 67.8%, 67.8% and 64.3%, respectively, described the contents of thought instead of their feelings; 9.3%, 9.4%, and 10.8% described the contents of value decisions and only 12.4%, 12.8% and 12.3% respectively described their feelings. Synthesizing all the results, the students were confusing the contents of thought, values and knowledge with their feelings.
Only the experimental group were exposed to the new teaching strategy. For the first environmental issue, lectures on the causes, factors and effects of soil erosion were delivered for a total of four hours to the experimental group. The post-test results of the experimental group, to which the new teaching strategy to foster environmental sensitivity was applied were as follows: 48.2%, 33.2%, 11.9%, and 3.1% were the responses corresponding to the contents of thought, feelings, value decision and knowledge respectively. The changes in values or knowledge were little, but the change in feelings was increased by 21.1%. The number of students who described thoughts decreased from 59.7% to 48.2%, being about 11.5% reduction.

For the second environmental issue, based on biodiversity loss, the post-test yielded the following results 51.9%, 28.5%, 14.5%, and 3.1% for the responses corresponding to the contents of thought, feelings, value decision and knowledge respectively. The change in feelings was increased by 14.7%. Also the post-test results of the experimental group for contents of thought decreased considerably.

For the third environmental issue based on waste management, the post-test results of the experimental group, to which was applied the new strategy were 38.2%, 45.6%, 10.4% and 4.2% for the responses corresponding to the contents of thought, feelings, value decision and knowledge, respectively. The fourth environmental issue based on destruction of the ozone layer, also shows similar trends of a decrease in contents of thought for a preference in feelings after the exposure to the lectures. For the fourth environmental issue, 48.7%, 36.6%, 8.2% and 4.1% were the responses corresponding to the contents of thought, feelings, value decision and knowledge, respectively. The changes in value and knowledge were relatively little, but the change in feelings increased by 24.3%. Also, the number of students who described thoughts decreased considerably for the experimental group. Therefore, it may be concluded that this strategy helps students to discover, understand and write their own feelings with regards to environmental issues.

Secondly, the analyzed results for intensity of feelings and percentage according to each environmental issue is shown in table 2. The intensity of feelings was graded into three category - strong, medium, weak.

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>Group</th>
<th>Intensity of feelings (%)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strong</td>
<td>Medium</td>
<td>Weak</td>
<td></td>
</tr>
<tr>
<td>Destruction of Land Resources</td>
<td>C</td>
<td>Pre-P</td>
<td>10.7</td>
<td>62.2</td>
<td>27.1</td>
</tr>
<tr>
<td>By erosion</td>
<td>E</td>
<td>Post</td>
<td>11.1</td>
<td>61.6</td>
<td>27.3</td>
</tr>
<tr>
<td>Problem of Biodiversity</td>
<td>C</td>
<td>Pre-P</td>
<td>10.6</td>
<td>60.4</td>
<td>29.0</td>
</tr>
<tr>
<td>Loss</td>
<td>E</td>
<td>Post</td>
<td>34.5</td>
<td>39.9</td>
<td>25.6</td>
</tr>
<tr>
<td>Problem of Waste Management</td>
<td>C</td>
<td>Pre-P</td>
<td>10.8</td>
<td>69.9</td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>10.9</td>
<td>67.8</td>
<td>21.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>10.6</td>
<td>60.7</td>
<td>27.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>30.1</td>
<td>41.8</td>
<td>28.1</td>
</tr>
<tr>
<td>Destruction of Ozone Layer</td>
<td>C</td>
<td>Pre-P</td>
<td>8.6</td>
<td>56.6</td>
<td>34.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>9.1</td>
<td>55.9</td>
<td>35.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8.3</td>
<td>55.5</td>
<td>36.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>34.9</td>
<td>42.4</td>
<td>22.7</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>Pre-P</td>
<td>5.3</td>
<td>36.7</td>
<td>58.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Post</td>
<td>4.9</td>
<td>36.9</td>
<td>58.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5.1</td>
<td>54.9</td>
<td>40.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>35.4</td>
<td>34.6</td>
<td>30.0</td>
</tr>
</tbody>
</table>

C - control group  
E - Experimental group  
Source: Author’s Experimental Application

For the first environmental issue, in the pre-test and post-test of the control group and the pretest of the experimental group, the percentage of students with medium intensity of feelings was
62.2%, 61.6%, and 60.4%, respectively. The students with weak intensity were 27.1%, 27.3% and 29.0% while those with strong intensity were 10.7%, 11.1% and 10.6% respectively. However, in the post-test of the experimental group, the responses for strong, medium and weak were 34.5%, 39.9% and 25.6% respectively. This result revealed that the medium decreased at the expenses of the strong intensity.

This tendency was reflected for the other three issues. For the second environmental issue - problem of biodiversity loss, the medium intensity for results in the pre-test and post-test of the control group and pre-test of the experimental group were 69.9%, 67.8% and 60.7% respectively, the weak intensity were 19.3%, 21.3% and 27.7% and the strong intensity were 10.8%, 10.9% and 10.6%, respectively. In the post-test of the experimental group, the strong, medium and weak intensity of feeling were 30.1%, 41.8% and 28.1% respectively, similarly, the medium intensity and the percentage of weak decreased.

For the third environmental issue - problem of waste management, the weak percentage intensity were 34.8%, 35.0% and 36.2% for the pre-test and post-test of the control group and the pre-test of the experimental group respectively. These were higher percentages when compared to the other issues. The medium intensity were 56.6%, 55.9% and 55.5% and the strong intensity were 8.6%, 9.1% and 8.3% respectively. These results reflected a lower percentage of strong intensity to waste management problems than the first and second environmental issues. In the post-test of the experimental group, the responses for strong, medium and weak were 34.9%, 42.4% and 22.7%, respectively. This result showed that the medium and weak changed considerably in favour of the strong intensity of feelings.

For the fourth environmental issue - destruction of the ozone layer, the weak intensity feelings were 58.0%, 58.2% and 40.5%; for the medium, it was 36.7%, 36.9% and 54.4% while for the strong, it was 5.3%, 4.9% and 5.1% in the pre-and post-test of the control group and the pre-test of the experimental group respectively. In the post-test experimental group, the strong intensity feelings increased from 5.1% to 35.4% while the medium intensity feelings decreased from 54.4% to 34.6%. According to the synthesized results, it was observed that the students developed stronger intensity feelings after they were taught on aspects while the medium intensity feelings decreased from 54.4% to 34.6% of the environmental issues mentioned earlier. Thus, if the students stated their feelings correctly, the newly developed strategy would be effective in reinforcing the intensity of various feelings.

For the third analytic base, the question: “what kinds of feelings were they?” was examined. This was done by checking the kinds of feelings the students’ statements expressed. The results are shown in Table 3.

Table 3: The Variety of Feelings about Environmental Issues Expressed in Post-Test of the Experimental Group

<table>
<thead>
<tr>
<th>Environmental Issue</th>
<th>HO</th>
<th>AX</th>
<th>FE</th>
<th>DI</th>
<th>UN</th>
<th>AN</th>
<th>RA</th>
<th>SU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destruction of land by soil erosion</td>
<td>10.0</td>
<td>6.3</td>
<td>20.3</td>
<td>35.4</td>
<td>20.4</td>
<td>3.6</td>
<td>2.5</td>
<td>1.6</td>
</tr>
<tr>
<td>Problem of biodiversity loss</td>
<td>23.5</td>
<td>13.4</td>
<td>3.4</td>
<td>6.3</td>
<td>22.1</td>
<td>10.0</td>
<td>18.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Problem of waste management</td>
<td>15.5</td>
<td>6.7</td>
<td>8.9</td>
<td>36.3</td>
<td>13.7</td>
<td>9.5</td>
<td>10.6</td>
<td>3.4</td>
</tr>
<tr>
<td>Destruction of ozone layer</td>
<td>4.1</td>
<td>29.2</td>
<td>17.2</td>
<td>0.9</td>
<td>8.6</td>
<td>2.1</td>
<td>1.3</td>
<td>36.5</td>
</tr>
</tbody>
</table>

The verbal and non-verbal feelings and emotions of humans are as follows: disgust, frustration, depression, fear, anxiety, nervousness, anger, rage, hope, expectation, sorrow, unhappiness, disdain, discomfort, stubbornness, desperation and so on. But in this study the feelings developed about the environmental issues discussed were limited to: hope, anxiety, fear, disgust, unhappiness, rage, and anger. For the first environmental issue 35.4% expressed disgust, while 20.3% expressed fear. 20.4% expressed unhappiness, although 10.0% are hopeful that the problem would be checked through responsible environmental behaviours.

For the second environmental issue - biodiversity loss, the feelings of unhappiness (22.1%), rage (18.1%) and anxiety (13.4%) were significant. However, 23.5% were hopeful that through adequate
environmental education this problem would be controlled. For the third environmental issue - the problem of waste management, the feelings expressed that are of importance-included disgust (36.3%), unhappiness (13.7%), rage (10.6%) and anger (9.5%). Here, again 15.5% expressed hope.

For the fourth environmental issue - destruction of ozone layer, 36.5% expressed the feeling of surprise, 29.2% expressed anxiety, while 17.2% expressed fear. 8.6% were unhappy about the problem. The 36.5% that expressed a feeling of surprise showed that prior to application of the teaching strategy they were completely ignorant of the concept.

Summary and Recommendation
Research into “sensitivity” is not abundant in environmental education or environmental management. Philosophical issues in environmental studies like environmental attitude, environmental responsibility and environmental ethics are intricately related to environmental sensitivity.

Environmental sensitivity in environmental education is defined as “the perspective of sympathy or compassion for the environment. It is different from that of the cognitive domain. Therefore, individual responsibility, attitude and a specific strategy are needed to agitate latent feelings about the environment.

Considering all these aspects, this paper applied the teaching strategy developed by Park and Chang (1998), to students of a secondary school in Enugu urban area, to foster environmental sensitivity, on the basis of a philosophy of humanistic education - “the whole (intellectual and emotional) man”. The main characteristics of this strategy are to evoke various feelings through physical relaxation and promote the abilities to create and change feelings through repeated examination of the present.

According to the results, the percentage of students confusing their feelings with values or thoughts decreased. Intensity of feelings towards environmental issues were stronger after sensitization, and the kinds of feelings were more varied when this teaching strategy was applied. Thus, the new teaching strategy proved to be effective in fostering environmental sensitivity.

Recommendations
In line with these findings this paper recommends that:

• environmental education should be included in curriculum of environmental management.
• environmental sensitivity must be included as a topic of inquiry, since it is observed that environmental sensitivity is capable of fostering responsible environmental behaviours.
• environmental sensitivity should be applied as a tool to promote environmental ethics.
• changes in environmental attitude should be employed as a means of inculcating responsible environmental behaviours.

Conclusion
This study has succeeded in bringing to fore the fact that environmental sensitivity can be imbued by teaching people about the causes, problems and effects of some environmental problems mankind is currently facing. And also environmental sensitivity can translate to good environmental attitude such as expressing feelings for both the animated and unanimated objects of the environment. The expression of different feelings such as hope, anxiety, fear, unhappiness and so on, can translate to responsible environmental behaviours. It is believed that the major hope left for salvaging the earth from further environmental degradation and deterioration is by imbibing responsible environmental behaviours.

References
Nnodu, Valerie. C.


