A Comparative Analysis of Environmental Awareness of Middle School Students in Green Schools and Non-green Schools in Lushui City

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Abstract. This paper mainly analyzed the environmental consciousness of middle school students in green schools and non-green schools in Lushui city by questionnaire survey. The result was shown that the environmental consciousness of middle school students in Lushui city was good, but the green school students' environmental awareness was generally higher than that of non-green school students. In the face of a variety of environmental problems in life, most students can’t solve from their own reality, there was a gap between the knowledge and the action. Then this paper puts forward some suggestions such as non-green schools should strengthen environmental education and increase the environmental education curriculum, students themselves should read more environmental awareness material. In the teaching process, we must attach importance to the necessity of environmental education, make teaching link with real life, so that students can improve environmental awareness in real life situation.

1. Introduction

Environmental consciousness is the product of social development. With the development and progress in full swings, the combination of environmental protection process and ideas released via various forms. The awareness knew by people at present is a collection of advanced concepts. What middle school students have is one vital part of current environmental awareness\textsuperscript{[1]}. As a result, it is very important to find difference of this cognition of green school and non-green school.

A conclusion can organize by analyzing international and domestic researches, that the knowledge of environment of middle school students not only one is vital part of what the society needed, but a backbone of future development. Altogether, this paper aims at analyzing relevant theories of environment, finding out the importance of integrating theories and practices. The purpose of the questionnaire which presents on this thesis, apart from studying and obtaining main factors that led different environmental educations levels, is coming up with ideas to enhance students environmental values and the construction of green schools.

As a fundamental school of disseminating environmental knowledge, green school construction is giving teachers and students chances to learn more information of environment, take part in the activities related of environmental protection and keep step with sustainable development. Furthermore, it advances the cooperation between teachers, students and the society. Different media already coexist that able to do more practices in protecting environment with changing attitude, motion, value and morality, and obtain more skills. In other words, there are more activities to help students and teachers to attribute themselves to the environment protection\textsuperscript{[2]}. At the same time, the definition of non-green school is shown on following.

1.1 Questionnaire Design

Five aspects are included that incomes of students’ families, environmental values, conscientiousness, laws knowledge and ethics in this questionnaire\textsuperscript{[3]}. And the achievements of the survey for other scholars and conditions of Lushui Schools will be considered as reference. In this paper, the First Middle School of Lushui, Shangjiang School, Gudeng School, Liuku School and Lushui National Middle School are interviewed as respondents. In addition, the first three of them belongs to green schools and the others are non-green schools. The questionnaire of 600 is sending
out to every grade in the school in October of 2016 which senior high schools and junior schools are got 100 respectively except 200 to the senior high schools of the First Middle School of Lushui. Validity of the questionnaire is showed as Table 1.

Table 1. Recycling Questionnaire and Effective Answer.

<table>
<thead>
<tr>
<th>School</th>
<th>The First Middle School of Lushui</th>
<th>Shangjiang School</th>
<th>The School of Liuku County</th>
<th>The National School of Lushui</th>
<th>Gudeng School</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling (pcs)</td>
<td>155</td>
<td>90</td>
<td>72</td>
<td>93</td>
<td>90</td>
<td>500</td>
</tr>
<tr>
<td>Validity (pcs)</td>
<td>155</td>
<td>61</td>
<td>60</td>
<td>60</td>
<td>80</td>
<td>416</td>
</tr>
</tbody>
</table>

1.2 Analyzation and Results

Stared in October 2016, it took one month to finish this research by questionnaire. Green schools of The First Middle School of Lushui, Shangjiang School and Gudeng School, also non-green schools that Liuku County School and the National School of Lushui is being the respondent, while green schools account for 3/5 of the survey play an important role in the research. 500 are recycling and 416 are valid with 83.3% and 83.2% respectively. And there are 186 boys and 230 girls cover 44.71% and 55.19% respectively.

For these five schools that mentioned above have middle students more than high grades students with the population of 219 and 197 respectively, which account for 52.64% and 47.36% separately. Details represent on following chart [8].

The ratio is 33.41% and 31.73% of average monthly incomes to student’s families which in the 500-1000 and 1000-3000 RMB total for them is 65.14%, higher than the proportion of incomes are not enough 500 Yuan or 5000 Yuan.

2. Comparison of “Green School” & “Non-green School” in Lushui

2.1 Differences of Environmental Concern

There is no student whose environmental awareness is terrible; on the contrary, students in Lushui City are active in protecting environment.

Compared the percentage of each school could get following answers that 43.65% students in the First School of Lushui City has a top priority in protecting the environment, 38.67% and 27.52% students are respectively having a good viewpoint of or a perfunctory attitude to save the environment. As well Shangjiang School is 19.84% to students whose environmental awareness are the highest and whose awareness is lower almost accounts for 11.04% and 14.68%. Besides, 24.60% students from Gudeng School also have a great consciousness of the environment. Of course, there is no student’s attitude is terrible but better and good to 16.02% and 18.34%. The cognition of the environment of students of Non-green schools seems like lukewarm severely and the proportion of the National School of Lushui City and Liuku School is 3.17% and 8.73% for students that their awareness of the environment is the highest and for the other two levels, which are 18.23%, 21.10% and 18.23%, 21.10% respectively. What's more, students’ great viewpoints of environmental protection are covered 8.73%, and having 16.02% students are aware of its importance of protecting the environment. 18.35% students only know a little knowledge of the environment.

A result can be gotten by analyzing the data above that the cognition of students in Lushui green schools are higher than that of non-green schools.

Various processes have been shown, so the student can get know more about the environment by these processes in the moment. Such as TV, radio, newspapers, books, training courses, classes, internet learning and communication with classmates. At the same time, all these approaches are involved in the questionnaire. There are 99 students which covers 23.80% are choosing to get more knowledge about the environment by TV. 28 and 10 students are willing to enhance the environmental education by listening to radio or looking through newspapers that account for 6.73%
and 2.64% respectively. Except processes we mentioned above, there are also several approaches can help students know more about the significance of environmental protection. Such as here are 11 students who questioned that trying to obtain more knowledge of the environment which takes up 2.40% of the total. And the proportion of training courses achieving, reading books and communication with classmates is accounted for 2.64%, 0.96% and 17.07% separately. From the table, there is no difficult to figure out the number of respondents for choosing these three approaches are 11, 4 and 71 respectively. In addition, and the most popular approach to study the environment is learning by surfing internet. There are 107 students take part in the questions activity, and lead to the highest ratio of 25.72% the second way is communicating with classmates, covers 20.67% with 86 students (Table 2).

### Table 2. Information Collecting Methods of Lushui School Students.

<table>
<thead>
<tr>
<th>Process</th>
<th>TV</th>
<th>Radio</th>
<th>Newspaper</th>
<th>Books</th>
<th>Training</th>
<th>Courses</th>
<th>Internet</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers</td>
<td>99</td>
<td>28</td>
<td>10</td>
<td>11</td>
<td>4</td>
<td>71</td>
<td>107</td>
<td>86</td>
</tr>
<tr>
<td>Rate(%)</td>
<td>23.80</td>
<td>6.73</td>
<td>2.40</td>
<td>2.64</td>
<td>0.96</td>
<td>17.07</td>
<td>25.72</td>
<td>20.67</td>
</tr>
</tbody>
</table>

#### 2.2 Differences of Environmental Concern

Most of the students are willing to attribute to protecting the environment by the graph 7, and it is reasonable that many students have this viewpoint as regard to the dialectical thinking of the human and the nature. And here is 50.44% respondents are supporting an idea that only respect the nature is the best approach to protect them. However, it also has 80.34% students think about building a harmony world with the nature is the best way to reduce the pollution. Thus, there is no doubt that students from Lushui have gotten a good education of the environment. And the pessimistic proportion of students’ awareness also is released by the data that analyzing the two sides of the nature. 30.45% students think it is not a good idea to utilize the nature resources. And for the opposite attitudes, it covers almost 28.21%, but also has 35.44% students think both advantages and disadvantages are same. No matter what the choice we make, holding a good viewpoint of the environment is very important to technology development and building a civilization world. And for green schools, you will find it, the environmental values are better than that of non-green schools form the Fig. 1.

![Figure 1. The Environmental Values Analysis of Lushui Schools.](image)

#### 2.3 Different Consciousness of Environmental Protection

The survey results show that the behavior intention of middle school students in Lushui City is not really satisfied. For example, question “are you willing to choose a public elective course which related on the environment when it was opening?” obviously, the answer is no for almost 18.23% students and 27.88% students are saying yes. However, the middle students who are confused about this question account for 50, 24%, it has been one half of the total. In addition, when questioned students attitude to ask their parents for money to deal with the contaminant, there are only 12.05% students are extremely happy to do like this, on the contrary, students who holding negative attitudes are covered 26.89%. And no wonder, the rest students of 61.06 % are answering blankly. It accurately shows a grim trend to grapple with environmental issues of middle students in Lushui City. And
another example is question that if you would step forward when you found someone is damaging the environment. That is a surprising answer that 70.23% students think it is none of their business. Only 2.34% students are willing to step forward to stop them and 24.54% also holding a thought of just let them do it, I will not stop them.

Although there is no high degree of participation to students in Lushui City, but we still could find it is better of green schools than non-green schools. Altogether, the environmental awareness of Lushui City has no a completely system to combine practices and theories.

As the backbone of environmental protection, only by improving environmental consciousness and education of strengthen environmental qualities, can we realize the self-environmental education of middle school students and make an example for people around to hold a correct attitude to protect the environment altogether. As a conclusion, it can easy find that students from non-green schools are not having a high degree of environmental participation.

2.4 Comparison of Ethics of Environmental Law

Through the analysis of the environmental ethics of middle school students in Lushui City, there is no big change of environment ethics to all schools students except the First Middle School of Lushui. The reason why happen like this may because the little education and propaganda to help students to enhance their environmental ethics. Another reason is that most of students have no much money to buy these green products when they want to buy something useful.

It also has a common phenomenon that students from green schools are holding a better environmental ethics, details are showed as Fig. 2.
attention paid school and backward teaching method of environmental education etc. all these factors make students do not have a unified action in the theory and practice.

The construction of green schools is an effective carrier for environmental education, especially for green schools. It not only ask schools leaders pay more attention on it, but also need students to attribute to join in activities, practice in life and develop an active attitude to protect the environment.

3.1.3 An Incomplete “Green School”

The Green school is the foundation that one school develops its own education based on the theory of sustainable development. Green schools can be an important carrier to spread the environmental knowledge, a good way to encourage people to enjoy themselves in environmental protection, an action of advance the sustainable development and help students, teachers and adults to cultivate an active attitude, motion, value and ethic.

A green school appears means a lot to the environmental education, so we have to promote it, enhance it and doing it[7]. In order to improve students’ environmental awareness, schools have to fully understand its significance and practice it with the theory instead that only developing a theory education.

3.2 Views and Strategies

3.2.1 Construction Propulsion

In conclusion, managing a school with green ideas is conductive to cultivate and carry out the concept of sustainable development and promote the development of modern socialist construction in an all-round way. And apparently, green schools are dominant to advance environmental education.

Local environmental authorities should give full play to its guiding role to help Lushui City to develop green schools constructions and educations. And for green schools and non-green schools, on the one hand, they need to work together, take advantages of each other and share experiences together. On the other hand, they need enhance its culture and environment soft power to green schools construction.

3.2.2 Channels Increasing of Environmental Knowledge

The government has to play all departments on the field, actively guide and promote the processes, adjust related policies and develop more channels to environment education via various sides. Because it is not only duties for schools, but also is the government duties, so schools need to break the routine and to be innovative while the government is making great efforts. There are many ways can promote environmental education, such as giving a related lecture, radio and activities for spreading knowledge of the environment. At the same time, students also need to develop more approaches to promote environmental awareness[6]. Reading by heart, turn off the TV and mobile phone, to get to know the goal of enhances environmental consciousness.

4. Acknowledgment

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5. References


[12]. China's environmental propaganda