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Awareness, Attitudes, and Practices on Climate Change Among Students of a Secondary Laboratory School in Northern, Philippines

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Abstract —- This study determined the level of awareness, attitudes, and practices on climate change among grades 10, 11, and 12 students. Hence, it determines if there is a significant difference in the level of awareness of climate interventions. The research employed descriptive research, particularly the survey method. Stratified simple random sampling was used in selecting the respondents which consisted of 164 students. An adopted questionnaire was used to gather the information in the study. Data collected were analyzed through mean, ANOVA, and Post Hoc test. As to attitudes, the mean ranking, Friedman's Rank test, and Pairwise comparison were utilized. Results revealed that grade 12 students have a high level of awareness both of man-made and natural causes. It was likewise revealed that as students' educational' levels increase, their awareness of climate adaptation and mitigation measures are further enhanced. The respondents displayed the attitudes of being fearful, hopeful, and sad indicating that they are willing to help and support climate change concerns. Positive attitudes have motivated the students to exhibit enhanced practices. Hence, the students have enhanced practices because they are obedient and responsible in complying with the solid work activities that are being conducted regularly in school.

Keywords: students' awareness, attitudes, practices, climate change, adaptation, mitigation measures

I. INTRODUCTION

Climate change is inevitable nowadays because of the various contributory factors and phenomena in the environment and beyond. This could be attributed to the uncontrolled cyclic processes in the natural world and to unfavorable anthropogenic activities like the dumping of excessive waste (Rosen, 2021). The negligence of many citizens now will result in an unbalanced biosphere. The concerted efforts of everyone should be enforced in order to come up with immediate action on this pressing problem. Initially, an information-dissemination campaign was conducted nationwide which is called the "Climate Change Act of 2009" under Republic Act 10174 (Official gazette, 2012). A need for the development of long-term public awareness on climate change and the production system of information and communication materials through the education system. Climate change comes in many forms such as global warming, the greenhouse effect, a sudden increase in temperature, excessive rainfall, changes in tidal waves and heights, and many more. Any drastic problem like heightened temperatures affecting the entire earth is described as climate change (Schuurmans, 2021). Thus, the awareness, attitudes, and practices of everyone today should be enhanced by involving the elementary pupils, Junior and senior high school students.

Facing the impacts of climate change which are manifested in various forms is now a hard-felt reality. These changes are the sudden change in temperature, amounts of snow and ice have melted causing the rising of sea level and the increased in the concentrations of greenhouse gases (IPCC, 2013). It is, therefore necessary to integrate climate

change literacy into the basic education curriculum. However, some authors did not incorporate climate change concepts in their textbooks even in the "science in society" portion. With the implementation of the K-12 curriculum, the Disaster Risk Reduction Management Program (DRRMP) subject was offered in the senior high school which gives emphasis on climate change adaptation policies and mitigation measures.

Climate change awareness is necessary to guide students' behavior towards concerned actions (Mcmillan et.al., 2004). Information about environmental degradation has already been widely disseminated among young students worldwide (Pekel and Ozay, 2005) but is not a priority in developing countries (Leiserowitz et.al., 2015). According to Rahman et. al., (2014) successful dissemination of knowledge at the high school level is critical to ensure lifelong pro-environmental behavior among future Bangladesh citizens. Likewise, regular information-dissemination on the knowledge of climate change can influence the adoption of better climate policy (Wang, 2017).

The study is delimited only to awareness, attitudes, and practices on climate change adaptation policies and mitigation measures among the selected high school students of Benguet State University. Specifically, to determine if there is a significant difference on the level of awareness on climate change adaptation and mitigation measures on man-made causes among the grade 10, grade 11 and grade 12 students, determine if there is a significant difference on the level of awareness on climate change adaptation and mitigation measures on natural causes among the grade 10, grade 11 and grade 12 students, find out the attitudes on climate change adaptation and mitigation measures as exhibited by the grade 10, grade 11 and grade 12 students; and determine the practices on climate change mitigation measures as exhibited by the grade 10, grade 11 and grade 12 students. Hence, only the grades 10, 11, and 12 students were selected as the respondents due to their advanced knowledge as well as their maturity to handle responsibilities. Such useful insights of the youth would be enhanced and would inspire them to develop appropriate attitudes and practices which they could pass on to the next generation. The result of the study could also be used as a piece of baseline information as to who could be tapped as facilitators during climate change awareness orientations and seminars and to assist the teachers during climate change-related activities. Likewise, this study would identify students who could help in the advocacy and implementation of good practices on climate concerns.

The youth play a crucial role in combating climate change because they are ICT literate and have enhanced knowledge in this field (Pandve et al., 2009). Besides, young people, nowadays possess the skills to spread new habits and technologies that could lead to the fight against climate change (Ki-moon, 2008). Thus, the youth can help in the successful implementation of disaster prevention and risk management strategies as they promote an essential shift in behaviors and change in mentalities. This is possible because they are adjustable to comply with low-carbon lifestyles and career options (Pandve et. al., 2009). Moreover, they can orient the stakeholders in the community by sharing and demonstrating what they have learned about climate change adaptation and disaster risk reduction Shaw et. al., 2009). In general, the youth can immediately and actively support the nation's initiatives on its advocacy and legislation (Pandve et. al., 2009).

As mentioned by Barreda (2018), developing countries like the Philippines are highly vulnerable to the impacts of climate change because it is very much dependent on climate-sensitive economic processes such as agriculture. This field has fewer resources to adapt financially, technologically, and socially (UNFCC, 2014). Besides, the article indicated that the sector of the youth is significantly affected and will face difficulty in their capacity to attain sustainability (UNFCC, 2007). This current situation on climate change in developing countries serves as an eye-opener to the youth. Moreover, according to Fernandez and Shaw (2013), awareness of youth about climate change should be integrated even into the formulation of disaster risk reduction plans. This is essential as the youth are among the marginalized sector of the society that bears much of the impacts of disasters (Gaillard and Pangilinan, 2010).

Climate change is experienced in most countries of the world. This condition is determined when there is a change in the state of the climate that can be measured by the changes in the mean and/or variability of its properties

(IPCC, 2007). Climate change can persist over a long period of time usually decades or even longer which results in extreme weather conditions like temperature, wind, rainfall, and humidity (Ayoade, 2003). The consequences of climate change are unfavorable to the environment in terms of health, agriculture, and transportation. In fact, in hot regions in the world, heatwaves and wildfires are very much unbearable for both humans and wildlife.

Also, researchers have found that the level of awareness, educational level, as well as some demographic variables, and previous participation influence attitudes and practices (Akpan & Falaye, 2009). Based on research findings from Hernandez (2018), levels of education can influence climate change adaptation approaches. Mitigation is devoted to the reduction of the rate of increase and scale of changes in greenhouse gases while adaptation aims to improve the capacity of defense and resilience which reduces the passive influence of climate change (Ge et. al, 2009). Advanced science and technologies play an important role in mitigation measures. There are major technologies promising to reduce greenhouse emissions, increasing carbon sinks, carbon capture, and storage. Many scholars, therefore; stress the interdependency of adaptation and mitigation efforts (Pielke et.al., 2007). Finally, as perceived by Howell et. al. (2016), there is much work to be done on the impacts of different framing of information on attitudes towards adaptation. If we are to successfully respond to the challenge of climate change, then public support for both mitigation and adaptation at a variety of scales will be necessary.

Supportive actions of the students to climate change adaptation and mitigation measures will be voluntary if their level of awareness, attitudes, and practices are enhanced. The stakeholders on this aspect will also adhere to policies and guidelines on climate literacy and environmental awareness in order to help the students to become more responsive to their duties and responsibilities regarding climate change concerns. Students' skills will be honed if they will be exposed to practicing the various adaptation and mitigation measures regularly. Thus, monitoring of actual activities shall be recorded and assessed for inputs. Furthermore, such skills will be transferred to the next batch by implementing a transfer process of the proposed strategies and actual accomplishments done in school and in the community. Finally, this study is significant as it promotes enhanced awareness, good attitude, and best practices among students on climate change adaptation and mitigation measures.

II. METHODOLOGY

2.1. Materials

Adopted questionnaire was the main material used in the study. Questions were modified and analyzed based on the guidelines of a stemmed author. Content was edited by a professor in the college of teacher education and a science professor before validation was conducted to a nearby senior high school.

2.2. Methods

Design - The study employed descriptive research specifically the survey method. It involved grades 10, 11, and 12 of Benguet State University- Secondary Laboratory School.

Sampling - The study conducted was done through a convenient sampling technique with the distribution of the respondents as follows; grade 10 (n=60), grade 11(n=48), and grade 12 (n=56), total respondents of 164. The respondents (Grades 10, 11, and 12) were selected due to their maturity in understanding the concepts and their readiness to handle responsible tasks.

Data Collection and Instruments - The data collected among the respondents were the adopted questionnaire based on the study of Hope (2016). The questionnaire was validated by a group of senior high students in a private school nearby, Kings College of the Philippines. The administration of the questionnaire was done with the help of the pre-

service teachers. The student respondents gave their consent before taking part in the study. The instrument used a 5-point Likert scale type that was adopted from Agboola and Emmanuel (2016) and the ranking of the attitudes was based on validated sources.

Data Analysis - Descriptive statistical tests such as mean, Friedman test or F-test, and Tukey's Honest Significant Difference Test or Post Hoc test were done after the Friedman test to check which groups are significantly different and which do not satisfy the first objective. For objective 2, the following statistical tools were used; mean ranking, Friedman's Rank Test, and Pairwise Comparison was done after Friedman's test to check which groups are differently significantly and which are not. For objective 3, Friedman test or F-test and Tukey's Honest Significant Difference Test were used.

The statements under objective 1 were rated on a 5-point Likert scale with the items marked as; 4.21–5.00 is extremely aware, 3.41-4.00 is moderately aware, 2.61- 3.40 is somewhat aware, 1.81- 2.60 is slightly aware and 1.00-1.80 is not at all aware was utilized for the awareness of the students on enhancing climate change adaptation and mitigation measures on the man-made and natural causes. Objective 2 was determined through the mean rank of the attitudes of the students. Then Pairwise comparison was used to determine the significant differences in the attitudes of the grades 10, 11, and 12 students. Lastly, the 5-point Likert scale with the items marked as: 4.21–5.00 is extremely aware, 3.4-4.00 is moderately aware, 2.61- 3.40 is somewhat aware, 1.81-2.60 is slightly aware and 1.00-1.80 is not at all aware was utilized for the practices of the students on enhancing climate change adaptation and mitigation measures.

III. RESULTS AND DISCUSSION

Table 1A

Students' level of awareness of the climate change adaptation and mitigation measures on man-made causes

Measure	Grade 10		Grade 11			Grade 12	
	Mean	DE	Mean	DE		Mean	DE
1. Planting trees regularly to resolve deforestation.	4.17	MA	3.57	MA		4.42	EA
2. Planting more trees to prevent global warming.	4.38	EA	3.66	MA		4.75	EA
3. Planting and preserving trees to avoid soil erosion.	4.32	EA	3.72	MA		4.75	EA
4. Implementing a total ban on logging to avoid flash floods.	3.95	MA	4.11	MA		4.40	EA
5. Planting trees to maintain sanctuaries of wildlife.	4.45	EA	3.81	MA		4.85	EA
6. Applying green technology at home and in school.	4.14	MA	3.58	MA		4.49	EA
7. Shifting to organic fertilizers in order to lessen methane and nitrous oxide emissions from synthetic fertilizers.	4.02	MA	3.51	MA		4.52	EA

8. Limiting vehicles in order to lessen carbon monoxide and carbon dioxide emissions.	4.22	EA	3.64	MA		4.57	EA
9. Conducting regular emission testing for vehicles and industrial firms by LTO.	3.97	MA	3.60	MA		4.29	EA
10. Stop burning non-biodegradable wastes such as plastic to minimize the emission of greenhouse gases.	4.40	EA	4.02	MA		4.62	EA
11. Practicing composting of biodegradable wastes.	4.43	EA	3.85	MA		4.74	EA
12. Being responsible for the use of social media in order to lessen radiation which adds up to the sudden increase in temperature.	3.75	MA	3.62	MA		4.23	EA
13. Minimizing unnecessary human activities such as gaming and computer-related recreation that emit radiation.	3.58	MA	3.40	SoA		4.05	MA
Overall Mean	**4.13[b]**	**MA**	**3.70[c]**	**MA**		**4.51[a]**	**EA**
F-value			**103.74[**]**				
p-value			**<0.000**				

Legend:

*** Significant at 1% level of significance.*

Means with the same letter are not significantly different at a 5% level of significance.

Likert Scale:

4.21 to 5.00 Extremely Aware EA

3.41 to 4.20 Moderately Aware MA

2.61 to 3.40 Somewhat Aware SoA

1.81 to 2.60 Slightly Aware SlA

1.00 to 1.80 Not at all Aware NA

Table 1a shows the means of the student's level of awareness on the climate change adaptation and mitigation measures on man-made causes where grade 12 students have the highest mean of 4.51 or "extremely aware". This means that grade 12 students have the highest level of awareness of man-made causes. The computed p-value is <0.000 which does not exceed a 0.05 level of significance hence the hypothesis is rejected. Therefore, there is a significant difference in the awareness of students from different grade levels. Meanwhile, grade 10 and grade 11 students have the means of 4.13 and 3.70 respectively, or "moderately aware" in their level of awareness; however, grade 10 students are more aware than grade 11 students in their level of awareness. With the findings of grade 11 students, there is a need to motivate; and expose them more to the actual scenes in the surroundings so that they will realize the need for policy implementation and concerted efforts. The findings of the study imply that grade 12 students have internalized what they have learned on climate issues. Likewise, they are interested in and willing to support environmental-friendly endeavors. The teachers

integrated climate literacy in their lessons and conducted ocular investigations like the polluted Balili river adjacent to the school. Probably the teachers have varied strategies like video presentations on climate change adaptation and mitigation measures which they have shown to have motivated and challenged the students. The moderate to extreme awareness reveals that the respondents have prior knowledge of climate change adaptation policies and mitigation measures on man-made causes (Wang et. al., 2020). Also, as mentioned by Malay (2019), a high level of awareness and strong positive attitude of the senior high school students towards issues on climate change is an indication that they are more likely to express willingness to act and participate in this global concern. As revealed by Malay (2019), the quality of climate change awareness is very essential as this affects the attitudes, behavior, and skills of people. When people are aware of the issues such as climate change, then they will respond positively to the resolution of the issues and concerns (International Knowledge Sharing Platform).

Table 1B

Students' level of awareness of the climate change adaptation and mitigation measures on natural causes

Measure	Grade 10		Grade 11		Grade 12	
	Mean	DE	Mean	DE	Mean	DE
1. Schools must conduct earthquake drills regularly.	4.42	EA	3.75	MA	3.09	MA
2. Students must be vigilant to access social media.	4.23	EA	3.68	MA	4.66	EA
3. Students must update themselves on daily weather conditions and incidents caused by any form of environmental degradation and abrupt climate changes.	4.38	EA	4.02	MA	4.60	EA
4. Students must provide their own first aid supplies in the classroom and at home.	4.28	EA	4.06	MA	4.40	EA
5. Students must be oriented on climate change adaptation and mitigation measures such as building and evacuation areas, first aid, light search and rescue, student supervision, shelter, nutrition, and sanitation.	4.29	EA	3.72	MA	4.58	EA
6. Students must adhere to policies such as avoiding the construction of high-rise buildings.	3.89	MA	3.55	MA	4.40	EA
7. Planting trees and bamboo on the riverbank in order to prevent the loosening of soil which may result in siltation in bodies of water.	4.25	EA	3.64	MA	4.60	EA
8. Conducting orientations and demonstrations on climate change adaptation and mitigation measures to schoolmates, neighbors, and stakeholders in the community.	4.25	EA	3.64	MA	4.11	MA
Overall Mean	4.25^{a}	EA	3.76^{b}	MA	4.31^{a}	EA
F-value	6.46^{**}					
p-value	0.010					

Legend:

*** Significant at 1% level of significance.*

Means with the same letter are not significantly different at a 5% level of significance.

Likert Scale:

4.21 to 5.00	*Extremely Aware*	*EA*
3.41 to 4.20	*Moderately Aware*	*MA*
2.61 to 3.40	*Somewhat Aware*	*SoA*
1.81 to 2.60	*Slightly Aware*	*SlA*
1.00 to 1.80	*Not at all Aware*	*NA*

Table 1b shows the means of the student's level of awareness of climate change adaptation and mitigation measures on natural causes. Results show that grade 10 and grade 12 students have the highest mean of 4.25 and 4.31 respectively or "extremely aware" which implies that these students have significantly higher levels of awareness of natural causes compared to grade 11 students. The computed p-value is <0.000 which does not exceed the 0.05 level of significance so the hypothesis is rejected. Therefore, there is a significant difference in the awareness of students on natural causes in the three grade levels. The findings connote that the grade 10 and grade 12 students have enhanced their level of awareness in the sense that they do further reading and searching aside from those being taught in the classroom. Also, they have shared their ideas, collaborated, and engaged during the discussion of the topics on climate change concerns in the classroom. They served as facilitators in environmental education-related activities because they are interested in and willing to support such activities especially if the subject teachers would require them to participate. Besides, the senior high students have a core subject in their curriculum namely disaster risk reduction management which delves into climate change adaptation and mitigation activities. This corroborates the study from the Journals and Books Hostings-Conferences and Workshops Solutions, which in basic education is an indication of improved climate literacy and comprehension of climate change adaptation and mitigation measures. These are vital to promote public engagement and support for climate action endeavors. Moreover, continuous and proper environmental education, utilizing new strategies, resources, and awareness can help secondary students understand scientific literacy that will promote sustainable development in the future (Atstaja, 2010).

Table 2A

Students' attitude towards climate change adaptation and mitigation measures on man-made and natural causes

Attitude	**Grade 10**		**Grade 11**		**Grade 12**		**Overall**	
	Mean	**Rank**	**Mean**	**Rank**	**Mean**	**Rank**	**Mean**	**Rank**
1. Angry	2.22	2	2.34	4.5	1.11	2	1.89	4
2. Confused	2.32	3	2.34	4.5	1.54	5	2.07	5
3. Disbelief	2.40	6	5.45	7.5	2.57	6	3.47	6
4. Fearful	1.89	1	1.64	2	1.09	1	1.54	1
5. Hopeful	2.34	4	1.57	1	1.22	3	1.71	2
6. No feelings	7.69	8.5	5.77	9	8.18	9	7.21	9

7. Did not understand	8.14	10	7.77	10	8.49	10	8.13	10
8. Did not learn	2.95	7	2.94	6	7.32	8	4.40	7
9. Powerless	7.69	8.5	5.45	7.5	5.37	7	6.17	8
10. Sad	2.35	5	1.66	3	1.23	4	1.75	3
Pairwise comparison	**a**		**a**		**a**			
Friedman statistic	**1.80^{ns}**							
p-value	**0.407**							

Legend:

ns – Not significant.

Grade levels with the same letter are not significantly different at a 5% level of significance.

Table 2a shows the attitudes of grade 10, grade 11, and grade 12 students on climate change adaptation and mitigation measures. Rank 1 attitude the overall was being "fearful" with a mean of 1.54 while rank 10 or the lowest was "did not understand" with a mean of 8.13. These results reveal that students from all grade levels had the same attitude towards climate change adaptation and mitigation with the mean of "**a**". Hence, their attitudes are not significantly different at a 5% level of significance. The result conveys that students are updated on climate issues and are affected by the phenomenon around the world. Thus, they are willing to extend help and assistance in the adaptation and mitigation activities in their school and community. In addition, they are hopeful that this concern will be addressed through the strict implementation of adaptation policies, observing the best practices, and well-managed mitigation measures. The students who did not understand climate change issues will learn and unlearn the concepts through various strategies and flexible platforms.

The attitudes of "fearful" and "sad" displayed by the students showed that they firmly believe that climate change is a major problem and truly exists and that immediate actions should be done about it (Lopez and Malay, 2019). However, the positive response like being "hopeful" showed that students recognize themselves as supporters of climate change advocacies and that something could be done in mitigating the effects of climate change (Asia Pacific Journal of Multidisciplinary Research, 2019). Further, students should be exposed to the dangers of climate change as early as possible to encourage them to develop positive attitudes towards the environment and reduce the dangers associated with climate change (Zhou, 2011).

Table 2B

Students practices in enhancing climate change adaptation and mitigation measures

Practice	***Grade 10***		***Grade 11***		***Grade 12***		***Overall***	
	Mean	***Rank***	***Mean***	***Rank***	***Mean***	***Rank***	***Mean***	***Rank***
1. The immediate use of greenhouses in agriculture.	1.34	2	2.89	8	2.74	8	2.32	6
2. Maximize green technology in the surroundings.	1.46	4	2.35	7	2.71	7	2.17	4

3. Two hours of hands-on and exposure only to radiation-emitting gadgets.	3.66	7	2.31	5	2.58	6	2.85	7
4. Regular clean-up drive.	4.09	8	2.31	5	2.25	5	2.88	8
5. De-clogging of dirty canals annually.	2.34	5	2.31	5	2.2	4	2.28	5
6. Managing proper segregation of wastes.	1.42	3	1.69	2	1.37	2	1.49	1
7. Maximize sorting out and recycling non-biodegradable wastes.	2.8	6	1.68	1	1.31	1	1.93	3
8. Picking- up always of non-biodegradable wastes along my way.	1.29	1	1.86	3	1.38	3	1.51	2
Pairwise comparison	**a**		**a**		**a**			
Friedman statistic	**1.75^{ns}**							
p-value	**0.417**							

Legend:

ns – Not significant.

Grade levels with the same letter are not significantly different at a 5% level of significance.

Table 2b shows the practices of grade 10, grade 11, and grade 12 students on enhancing climate change adaptation and mitigation measures. Overall, rank 1 practice was managing proper segregation of wastes with a mean of 1.49 while rank 8 or the lowest was regular clean-up drive with a mean of 2.88. Students from all grade levels had the same practice in enhancing climate change adaptation and mitigation with the mean of “a”. Hence, their practices are not significantly different at a 5% level of significance. The high level of awareness of the students influenced their attitudes and practices. The acquired positive attitudes of the students have motivated them to exhibit enhanced practices primarily in the following activities; managing proper segregation of waste through sorting out and picking up non-biodegradable. Most of the students have enhanced practices because they are obedient and responsible in complying with the solid work activities that are being conducted regularly in school.

As confirmed by Ratinen (2020) educators should build on local, scientific, and existing practices to attune with the community priorities. There is indeed a need for enhanced management practices like varied adaptation strategies to harmonize with the mitigation measures in lowering greenhouse gases and carbon dioxide emissions. For instance, one best practice of the secondary students is their willingness to switch off lights and to give up the use of electrically operated appliances in order to help mitigate climate change (Hermans and Korhonen, 2017). Impose adaptation policies and push the top-ranked practices to be done regularly in school and in the community.

IV. CONCLUSIONS

Based on the findings, the following conclusions were drawn:

The grade 12 students have advanced knowledge and deeper comprehension of the concern about greenhouse gases, sudden changes in temperature, and carbon dioxide emissions. Their awareness was enhanced because they have a subject in their curriculum year, Disaster Risk Reduction Management (DRRM) which covers environmental issues. Moreover, they are willing to facilitate and demonstrate the skills needed by their schoolmates, especially in the lower grades. Therefore, the grade 12 students could be tapped as facilitators in webinars and orientations on climate change awareness on adaptation and mitigation measures that are being conducted in their school and community. Hence, this could be a ground for policymakers to invite grade 12 students as leaders in disseminating and implementing guidelines in addressing issues on man-made and natural causes of climate change in their schools and community.

Grades 10, 11, and 12 have the same attitudes on climate change adaptation and mitigation measures. The students strongly believe that climate change is such a big problem and truly exists so immediate actions should be done about it. Meanwhile, the “hopeful” attitude of the students is an indication that there is still a chance for the world to recover from the destructive effects of climate change. Thus, the students recognize themselves as active supporters and ultimate implementers of policies to enhance climate change issues. The rest of the students who did not understand climate change issues will learn and unlearn the concepts through various strategies and flexible platforms.

Lastly, the practices exhibited by grades 10, grade 11, and grade 12 students are the same and the most enhanced practice observed by the secondary students is on managing segregation of waste. The students are only familiar with the common practices on enhancing climate change adaptation and mitigation measures being conducted regularly. However, it is imperative to mitigate environmental destruction. Awareness of the best practices on mitigation measures leads students to be actively involved. This is done through formal and informal classroom activities. The care and concern for the environment are best developed in the students if the practices on climate change adaptation could be regularly taught in the basic education curriculum. Continuity and sustainability of their favored practices and strengthening of the least favored activities must be inculcated in them. Students are aware only of common and basic policies and laws against air pollution but are not knowledgeable and updated on new laws relative to air pollution like the clean air act and laws on smoke testing.

V. RECOMMENDATIONS

A continuous information-dissemination on the man-made causes of climate change so that the secondary students will be aware on the preventive measures. Likewise, climate change literacy will be integrated in their lessons and strict implementation of policies may be observed. Students from the higher can be designated and trained as facilitators and resource speakers in environmental education and climate change related activities.

Fearful and sad attitudes towards climate change is an unpleasant disposition showing an existing problem. However, such scenario enforces the policy makers for immediate implementation of guidelines and that immediate actions may be done on climate change concerns.

Familiarize the secondary students to enhanced management practices like varied adaptation strategies to harmonize with the mitigation measures.

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