Abstract: This learning module was prepared as part of the Philippines' Social Studies curriculum for Grade 10 Social Studies – Contemporary Issues, which is a new curriculum to be implemented nationwide for the first time in the next schoolyear 2017-2018, beginning June 2017. It is a 12-day program included in the First Quarter of said Grade 10 course. It was developed through a series of workshops participated in by public school Social Studies teachers and supervisors in Quezon City, Metro Manila and principals and teachers in San Mateo, Rizal. The Quezon City Division of the Department of Education was a partner of the Charter of Human Responsibilities Philippine Facilitation Team in the process. This module includes Climate Change, Disaster Risk Reduction and environmental issues in the locality.

Learning Module on ENVIRONMENTAL ISSUES

Part of First Quarter, Social Studies Grade 10: Contemporary Issues K-12 Philippine Social Studies Curriculum

I. CONTENT STANDARDS, Grade 10, Social Studies:

Demonstrate a deep understanding on contemporary issues in the fields of environment, economics, political, human rights, education, and civic responsibilities being faced by the country at present using investigative skills, data analysis and various references, research, critical thinking, effective communication, justice, and decisions-making.

II. CONTENT STANDARDS (Environmental Issues)

The students shall understand local and foreign environmental issues toward contributing to national and international development.

III. PERFORMANCE STANDARDS (Environmental Issues)

The students shall be able to construct a project that would demonstrate their ability to analyze environmental conditions and create appropriate responses.

IV. ESSENTIAL UNDERSTANDING

For the students to understand the causes and effects of climate change on communities, which would include ongoing disasters, and the different stages of Disaster Risk Reduction and Management, which include: 1) prevention and mitigation, 2) preparedness, 3) response, 4) recovery and rehabilitation.

V. ESSENTIAL QUESTION

How do communities adapt to climate change and its effects on the communities?

VI. LEARNING COMPETENCIES

- 1. Explain the different types of disasters experienced in the community and the country.
- 2. Connect the actions and decisions of people in the community in times of disasters.
- 3. Determine the preparations that should be done in the event of a disaster.
- 4. Identify government agencies responsible for the safety of citizens during disasters.
- 5. Give importance to the discipline and cooperation between citizens and governments during disasters.

- 6. Explain political, economic, and social aspects of Climate Change.
- 7. Discuss the various programs, policies, and regulations of the government, as well as the global organizations on Climate Change.
- 8. Determine the Climate Change impact on the environment, society and economy in the country and the world.
- 9. Explain the environmental problems being experienced in one's own community.
- 10. Discuss the steps the government takes in dealing with and responding to environmental issues in one's own community.
- 11. Conduct a case study on the causes and effects of environmental problems being experienced in one's own community.

VI. TIME ALLOTMENT: 12 hours spread over 12 school days

VII. PERFORMANCE TASKS

A. Objectives

For the students to prepare a plan in dealing and responding with environmental problems caused by climate change in their own communities before, during and after a disaster in any coherent and integral form, be it a model, a paper, a poster, a video, etc.

B. Roles

You are a member of the Barangay (smallest local government unit) Disaster Risk Reduction and Management Committee (BDRRMC) as (choose from the following):

- 1. Youth leader and representative of the youth sector;
- 2. Barangay official;
- 3. a member of the neighborhood association with five children; or
- 4. a member of a senior citizen group

C. Target Audience

The residents of your community

D. Situation

You are a member of BDRRM Committee from: 1. Youth Sector (Youth Leader); 2. Barangay Official, 3. a member of the neighborhood association with five children; or 4. A member of a senior citizen group. You are commisioned by the Barangay Council to suggest proposals on how to deal and respond before, during or after a disaster or calamity in your community.

E. Product

The proposed project will meet one of the following disaster by one of the following performance task:

Disaster (choose any)	Performance Task (choose any)
Heavy storms causing flood	Photo collage or other methods of collage

Movements in the West Valley Fault	Model or 3D map or diorama
Dengue Epidemic	Video
	Infographics
	Photo Exhibit
	Film Showing

F. Rubrics

Criteria	Accomplished (4)	Competent (3)	Developing (2)	Beginning (1)
Presentation/ Organization of thoughts	The infomercial is realistic and full of ideas.	The relationship of the concepts is exhibited and explained clearly.	The relationship of the concepts is explained.	The idea imparted needs improvement.
2. Clarity of ideas	The idea used in the infomercial is effective and easy to understand.	The idea is illustrated clearly.	The presentation is presented with clarity though there are at least 1-2 aspects that are unclear.	The clarity of the infomercial is at the basic level and needs further improvement with its components.
3. Explanation in accordance to the objectives	The group clearly demonstrated knowlege in accordance to the objectives.	The group demonstrated knowlege in accordance to the objectives.	The infomercial could be improved in accordance with the objectives.	The information provided through the infomercial was not clear.
4. Creativity (Animation, Sound, Effects)	The infomercial was presented exceptionally.	Demonstrated the use of 2 criteria in the presentation	Exhibited the use of at least 1 criterion in the presentation	The method used in the presentation could be further improved.

5. Participation of	The members of the group	The members of the group	There are one or two	There are more than three
members in the production	participated actively and	particpated in making the	members who did not	members who did not
	enthusiastically in the	infomercial.	participate in the production.	participate in making the
	creation of the infomercial.			infomercial.

Other rubrics example:

Element	High Proficiency (4)	Proficiency (3)	Some Proficiency (2)	Limited Proficiency (1)
1. Suitability of the response to the disaster/ calamity	The response is appropriate to the disaster and there is an additional element that would be beneficial to the community.	The reponse is appropriate to the disaster.	There are 1-2 response elements that are not covered.	There are 3 or more reponse elements that are not covered.
2. Clarity of the presentation	The presentaion was executed very clearly and exeptionally.	The presentation was executed with clarity.	The presentation was executed with some clarity though there were 1-2 aspects that were unclear.	The clarity of the presentation is very basic and there are 3 or more aspects that needed further improvement.
3. Quality of community participation with the response	The community sector/s involved is/are active and passionate in their participation in accordance to the response.	The community sector/s involved is/are participating in accordance to the response.	Despite the community's participation in the response, there are areas that could be improved that could further deepen their participation.	The lack of the sector's participation in the disaster's response is apparent.
4. Number of beneficiaries to the response	The entire community, as well as others outside the community, would benefit from the response.	The entire community would benefit from the response.	There are one or two sectors of the community who would not benefit from the response.	There are three or more sectors in the community who would not benefit from the response.

5. Group participation in the presentation	All members of the group have actively and passionately participated in the activity.	All members of the group have participated.	There are one or two members who have not participated.	There are three or more members who have not participated.
6. Explanation regarding the presentation	The explanation is clear enough based on the objectives of the activity and could be related to other aspects of Disater Risk Management and Climate Change.	in accordance to the	The manner of explaining could be improved to understand the presentation better.	The explanation is not clear.
Total				

VII. Daily Activities Plan

FIRST DAY

GENERAL TOPIC: Disaster Risk Mitigation

SPECIFIC TOPIC: Disasters and hazards affecting the community and the country

LEARNING COMPETENCIES

1. To be able to explain the different types of disasters experienced in the community and the country.

OBJECTIVE

For the students to be able to illustrate disasters experienced in the community, its causes, the risks and hazards involved, and the relation of disasters and the community's geographical location.

ACTIVITIES

Students shall be shown a video of a disaster and then the class will be divided into groups to make a presentation either on a scenario during an actual disaster, news reporting and interview of a victim during a disaster, giving aid to disaster victims, etc. This group presentation shall be followed by a class discussion on the different disasters that people and communities face.

Video/ Powerpoint Review



Group Activity: Role-playing

Scenario 1: Students to depict an area after a disaster

Maalala Mo Kaya: Ito ang aking karanasan (Can you remember? This is my experience)



Scenario 2: News reporting of an actual disaster and interviewing a victim

TV – An interview by Kara David (a newscaster)



Scenario 3: Providing aid to classmates affected by disaster or providing donations to victims

Kapwa Ko Mahal Ko (I love my neighbor.)

People/ agency who became part of my experience in times of disasters.



SECOND DAY

GENERAL TOPIC: Disaster Risk Mitigation

SPECIFIC TOPIC: Vulnerabilies in the community and the country, including preparations, actions and decisions of people during disasters.

LEARNING COMPETENCIES:

2. To be able to relate the actions and decisions of people in time of disasters.

3. To be able to determine the preparations to be done in the event of a disaster.

OBJECTIVES

For the students to explain the vulnerabilities in the community and the country, how people prepare for upcoming disasters, as well as how people should respond and decide in times of disasters.

ACTIVITIES

Students shall be grouped and shall be asked to perform any one of the below-mentioned tasks. After their presentation, a class discussion will follow on the vulnerabilities of their communities to disasters, how people prepare for disasters, and how they act and make decisions in time of disasters.

Barangay Puzzle

Students would construct a community vulnerability and resource map of a Barangay where schools and their homes are located.



Barangay Collage

Construction of a Barangay Collage that would illustrate the location of schools and homes

Color Coding

Color-coding based on places more affected by various disasters.

WARNING! BABALA!

Creation and placement of warnings (babala) in places highly affected by disasters.

How Safe is Your House?

#BagyoDrill (typhoon drill) based on the students' barangay

"Serena, Kampana, Barangay Patrol"

Drill on how to warn community members on impending disasters using the community church bells, whistles, texting or other tools.

THIRD DAY

GENERAL TOPIC: Disaster Risk Mitigation

SPECIFIC TOPIC: Government agencies and guidelines on its laws and regulations

LEARNING COMPETENCIES

4. To be able to determine the government agencies responsible for the safety of citizens in times of disasters.

OBJECTIVE

For the students to explain the role of government agencies responsible for the safety of citizens in times of calamity, know the international regulations and guidelines and national laws such as the Hyogo Declaration, Sendai Declaration, and R.A. 10121, which serve as guides to disaster mitigation, response and recovery, and rehabilitation.

ACTIVITIES

The teacher will present the different government agencies involved in disaster preparedness, response and rehabilitation. After which, the class will perform any one or two of the following activities.

Logo Naming/ Acronyms Contest

Students will identify the names of the government agencies in-charge of disaster planning, response, and rehabilitation.



"GOVERNMENT AGENCY IN ACTION"

Students will collect the contact persons and numbers of agencies, and define their roles and responsibilities, making these into school posters.



Poster-making/ Hugot Lines

Students will make posters based on the contents of the Declaration of Sendai/RA 10121.



Plotting a Graph: LAANG PONDO PARA SA INYO!

(Allocated Funds for you)

Students will identify the funds allocated to the community for disaster response and rehabilitation, and make a plan on how to use these funds in terms of programs and services.



FOURTH DAY

GENERAL TOPIC: Disaster Risk Mitigation

SPECIFIC TOPIC: The cooperation between the government and its citizen in times of disasters.

LEARNING COMPETENCIES

5. To be able to explain the need for cooperation and discipline between the government and its citizen in times of disaster.

OBJECTIVE

For the students to illustrate experiences in cooperation between citizens, organizations, and the government in times of disasters.

ACTIVITIES

The class shall be divided into groups. Each group shall be asked to perform any of the below-mentioned activities. After which, a class discussion shall follow on how cooperation between citizens, local organizations and government is important is times of disasters.

Group Skit/ Tableau

"Mannequin Challenge/ Scenario"

Hold, Cover, Duck Earthquake Drill/ Flood Rescue







Actualization – Repacking of Relief Goods

Daloy ng Paglilingkod/ Pagtutulungan

Illustrates the relationship among Student-Barangay-City-Country



FIFTH DAY

GENERAL TOPIC: CLIMATE CHANGE

SPECIFIC TOPIC: Political, Economic and Social Aspects of Climate Change

LEARNING COMPETENCIES:

6. Explain political, economic, and social aspects of Climate Change.

OBJECTIVE:

The schools will be able to explain the political, economic, and social aspects of Climate Change and provide examples and applications in each of the aspects.

ACTIVITIES:

Students shall first answer a K-W-L Chart (What you know, what you want to know, and what you want to learn). Then the class shall be divided into three groups and will undertake the activity Student Teams-Achievement Division. Each group shall discuss the a) political, b) economic, and c) social aspects of climate change. Then the whole class will listen to the group reports, and a synthesis shall be made at the end.

- 1. K-W-L (What you know, what you want to learn and what you learned)
 - Teachers will evaluate the prior knowlege of students about Climate Change in terms of its political, economic and social aspects.
 - The teacher will then determine what students need and want to know or learn about the topic.
 - After presenting what climate change is, the teacher will ask the student of what have they learned.
 - Chart Guide:

What they know?	What they want	What they have
	to learn?	learned?

2. Students Teams-Achievement Division (STAD)

GUIDELINES:

- The class will be divided into three (3) groups (Political, Economic, Social)
- The teacher will present the lesson and will facilitate a "socratic debate." The lesson then would be studied within the group.
- The students would be given a short quiz. Their scores would be based on their outputs.
- The total individual score of each student will be the overall score for the team.
- The group that would meet the criteria given by the teacher would receive a certificate or a reward.

SIXTH DAY

GENERAL TOPIC: Climate Change

SPECIFIC TOPIC: International programs, policies, and regulations on Climate Change.

LEARNING COMPETENCIES

7. Discuss the various programs, policies, and regulations of the government, as well as the global organizations on Climate Change.

OBJECTIVE

Students shall be able to explain and critique programs, policies and regulations of the national and local governments in relation to Climate Change.

ACTIVITIES:

Teachers can choose any of the following activities: a) In the News and b) Paris Conference: Debate. After this first activity, the class will discuss the international policies, programs and regulations on climate change.

1. IN THE NEWS

This is a peer teaching approach that would provide additional information to the students. Students shall be grouped and each group will teach the whole class based on articles of climate change assigned to each group to study.

Each group shall make the following retrieval chart:

PROGRAM	INTERNATIONAL POLICY/REGULATION	INTERNATIONAL AGENCIES INVOLVED IN POLICY
		FORMULATION AND IMPLEMENTATION

2. DEBATE

Video clip viewing: "Paris Conference Issue – Climate Change". Students shall be asked their reaction based on the video. Theme of discussion would be: Do you agree with the terms of the "Paris Conference"? After the class deliberation, the the teacher will provide a conclusion based on the students' standpoint about the issue.

SEVENTH DAY

GENERAL TOPIC: Climate Change

SPECIFIC TOPIC: National programs, policies, and regulations on Climate Change.

LEARNING COMPETENCIES

6. Discuss the various programs, policies, and regulations of the government, as well as the global organizations on Climate Change.

OBJECTIVE

Students shall be able to explain and critique programs, policies, and regulations of international organizations on Climate Change.

ACTIVITIES:

The class shall conduct a MOCK CITY COUNCIL SESSION WITH HEADS OF GOVERNMENT AGENCIES INVOLVED IN CLIMATE CHANGE. Students will take on specific roles in this Mock Session. To be discussed are the programs and plans of the national government and to ask questions on how the national plans will be implemented are members of the CITY COUNCIL.

The class will end with a synthesis of the discussion on the role of the national and local governments in mitigating and responding to the problem on climate change.

EIGHTH DAY:

GENERAL TOPIC: Climate Change

SPECIFIC TOPIC: Effects of Climate Change in the environment and society, especially to women and children, and to the economy of the country and the world.

LEARNING COMPETENCIES

8. Determine the Climate Change impact on the environment, society and economy in the country and the world.

OBJECTIVE

Students shall be able to explain the significance and impact of Climate Change on the environment, society and economy of the country and of the world.

ACTIVITIES

Students will watch a ten-minute video clip on the effects of climate change. This will be followed by asking questions and commenting about the video. This will be followed by a Paglalakbay-isip (Imaginary Travelogue) on the tsunami due to typhoon in Leyte in 2013. Leyte is a tourist destination with historical, religious and cultural artifacts. One pre-assigned student shall act as a tourist guide. He/she shall explain what happened in Bohol and how the people are affected by the destruction from the typhoon. Such strong typhoons and in the atypical month of November happened because of Climate Change.

The class will then continue the discussion on the effects of Climate Change in the country and in other parts of the world environmentally, socially and economically.

NINTH DAY

GENERAL TOPIC: Environmental issues with one's community.

SPECIFIC TOPIC: Experiences with environmental issues within one's community.

LEARNING COMPETENCIES:

To be able to determine the environmental issues experienced within one's community.

OBJECTIVE

For the students to identify environmental issues being experienced in their own community and to provide concrete examples and experiences, i.e. waste management, mining, flashflood, evaluate the effects caused by environmental problems in their community or barangay, and give importance to the environment in one's community/ barangay.

ACTIVITIES

The teacher can ask the class to do any one or more of the following activities mentioned below. Working by groups is an option if the teacher chooses to actualize all the activities below. After which, the class will conduct a discussion on the environmental issues affecting the community.

Gawain #1 (Option 1): Suri-rawan (REFRESH)

Instruction: Analyze the illustrations of specific disasters and provide own observations.

Gawain #2 (Option 2): Picture Puzzle

Instruction: Teacher to provide pieces of a puzzle. Students shall solve the puzzle by forming a picture on the blackboard. Students are to identify what the picture is all about.

Gawain #3 (Option 3): Students shall listen to a song ("Masdan mo ang Kapaligiran" [Observe the environment] by Asin or "Anak ng Pasig" [Child of the river Pasig] by Smokey Mountain). Students shall answer the following guide questions:

- 1. What is the theme of the song?
- 2. Are there any similar issues in your community?
- 3. What are the emotions you felt while listening to the song?

Gawain #4 (Option 4). Informercial.

Students shall be asked to make an on-the-spot informercial and answer the following questions:

- 1. What is the theme of your infomercial?
- 2. Are there any similar issues or experiences in your community?
- 3. Why had this been the infomercial that you presented?

TENTH DAY

GENERAL TOPIC: Environmental Issues in one's community.

SPECIFIC TOPIC: The government's response to environmental issues in own community.

LEARNING COMPETENCIES

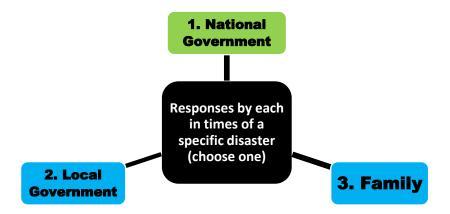
10. Discuss the steps the government takes in dealing with and responding to environmental issues in one's own community.

OBJECTIVE

For the students to evaluate the local or national government response to specific environmental issues in their community.

ACTIVITIES

The students shall then make a Radial Cluster identifying the roles and responsibilities of the national government, the local government and the families in the communities in times of disaster. This will be followed by a group discussion to evaluate the local or national government response to specific environmental issues in the communities.



ELEVENTH TO TWELFTH DAY

The last two days are reserved for the authentic performance presentation based on the Authentic Performance Tasks in Section VII (Performance Task). Optional is for teachers to conduct a written assessment on the topic.