

LESSON STUDY PLAN

Science

Maria Regina College, Naxxar

SECOND LESSON (FIRST CYCLE)

<i>Lesson Title:</i>	Climate Change
<i>Subject:</i>	Integrated Science
<i>Teachers involved:</i>	Audrey Vella Bondin, Angie Mercieca, Anna Quattromani, Anne Mangion, Marianne Zammit, Ann Marie Cefai
<i>Facilitator:</i>	Audrey Vella Bondin – HOD
<i>Teacher:</i>	Ann Marie Cefai
<i>Year Group:</i>	Year 8 – a class of 15 students
<i>Date:</i>	5 th April, 2019
<i>Time and duration</i>	13:30 – 14:50 (1hr 20 mins)
<i>Lesson purposes:</i>	Students will be able to: <ul style="list-style-type: none">• Explain what climate change is and identify some signs of climate change.• Explain what the Greenhouse Effect is.• State examples of how to reduce their personal carbon footprint.• Work in groups and solve problems together.
<i>Objectives addressed:</i>	8.3 Help students to identify the environmental implications of using fossil fuels and issues re climate change
<i>Lesson overview:</i>	<p>This lesson links to the eight topic Climate Change (I) – Energy and the Environment namely Greenhouse Effect, Carbon Footprint and Climate Change.</p> <p>First the students are going to watch video regarding climate change. Then we would do a class discussion on the video.</p>

Students in groups will do the jigsaw method where in groups of three students will discuss and teach what is Climate Change, Carbon Footprint and Greenhouse Effect. Afterwards, students will do a quiz on the three topics they just learned.

Promoted practices:

We included **group work** as it has several benefits mainly:

- Students engaged in group work, or cooperative learning, show increased individual achievement compared to students working alone.
- Group work enhances communication and collaboration.

We included **student centered learning** as it has several benefits mainly:

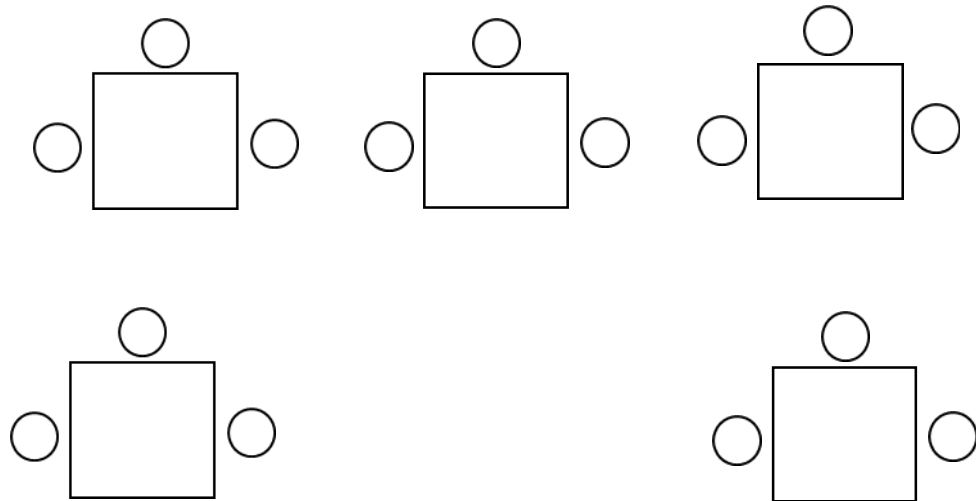
- Develop more thinking skills.
- Students will become more active learners.

Resources:

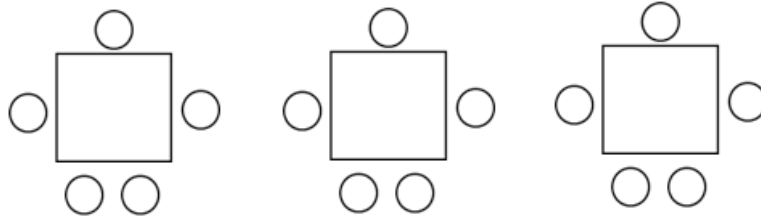
Interactive whiteboard, power point presentation on climate change, videos on climate change as an introduction and conclusion to the lesson, handouts of Greenhouse effect, Climate Change and Carbon Footprint, Quiz, noticeboard.

Classroom organisation

Students are seated in five groups of three for the first part of the jigsaw method and for the quiz.



Then student form an expert group (for the second part of the jigsaw method) where they are three groups of five



<p>Part 1 Lesson introduction</p>	<p>Teacher says: “Good morning! As you already know, we are here today to study a lesson that a group of teachers planned together. The observers here will be focusing on our planning of the lesson and what you can learn from it. So, try not to worry about them. They are here to help us improve our teaching and your learning of science. This lesson is also going to be video recorded.”</p> <p>Teacher asks: “Is this fine with you?” (Pause of 5 seconds)</p>
<p>5 mins</p>	
<p>Part 2 Whole Class Discussion</p>	<p>Introduction: So the first thing we are going to do is watch this video clip. https://www.youtube.com/watch?v=_UDL5VqPEXY</p> <p>What comes to mind after watching this video? How do you feel after watching this video? What do you think we are going to talk about?</p>
<p>6 mins</p>	
<p>6 mins</p>	<p>Explanation of what is the Jigsaw Method: Today instead of me teaching you. You are going to teach each other. Each one of you will be given a handout on a particular topic either Greenhouse Effect, Global Warming or Carbon Footprint. Here is a video clip which shows exactly what you are going to do. https://www.youtube.com/watch?v=KzJpVE-fQeE First you will read the information on your own. Since you are a good class, you are not going to do one paragraph you are going to do the whole page. Then together with the other students that have the same topic you will discuss that particular topic. Make sure you covered all the important points and practice what you are going to say. Once you are ready, you will go back to your original group and explain what you have learned to the rest of the group. Afterwards we will do a quiz to test what you have learned.</p>

<p>Part 3</p> <p><i>Group work activity</i></p> <p>5mins</p>	<p>Jigsaw Method:</p> <p>Student are divided into five groups of three. Each student in their respective group is given a handout on one of the three topics: Greenhouse Effect, Climate Change and Carbon Footprint. First each student will read it on his/her own.</p>
<p>15 mins</p>	<p>Once the students have read the information on their own, they will find the other four students that have the same topic as them. Students will then discuss the main points of their particular topic. Students are to rehearse what they have to say to the other students.</p>
<p>20 mins</p>	<p>Once the students are confident enough in what they have to say, they will go back to their original group. One after the other they will explain their particular topic. The other students will ask questions where they do not understand. Teachers will go round the groups to check that the students are sharing the correct information.</p>
<p>Part 4</p> <p>15 mins</p>	<p>Quiz</p> <p>In the same group of three a quiz is done on the three topics covered. One question is done per group. If one group get an answer incorrect it will go to the next group as a bonus question. Teacher instructs the students that the first answer is the one that counts. The winners will be the ones who got the most correct answers.</p>
<p>3 mins</p>	<p>Concluding video</p> <p>The teacher shows the students a video on climate change which is a continuation of the first video shown at the beginning of the lesson.</p> <p>https://www.facebook.com/100000503122645/posts/2813036328723110/</p>
<p>Conclusion</p>	<p>Well done for your work and participation. Now let's do a summary of today's lesson:</p> <p>"What did you learn today?"</p> <p>(Pause)</p>

Great!!
Hope you enjoyed the lesson!

*Problems
which we may
encounter*

- Some students might be absent. Therefore, we won't have equal number of students in each group to do the jigsaw method. If that problem arise, there will be two students doing the same topic in a particular group.
- Students might not be able to explain to the other students their assigned topic.
- Students might start reading from the paper instead of explaining it to the other students in the group.
- Students might start discussing other things not related to the topic assigned. Therefore, it is important that teachers go round the groups.
- Time might not be enough therefore the teacher carrying out the lesson should be cautious to keep up with the plan.