# Inquiry Project Plan main

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| **Inquiry Title:** |  Global Warming | **Time Frame** | Four-day workshop | **Inquiry Approach:** | Design thinking |
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Inquiry Project Rationale & Overview

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| **Why does this topic matter to students?**Global warming and its future consequences on human beings and on this planet are a topic of concern. The class 7 students need to be familiar with this topic so that they can be aware of their responsibilities towards saving the planet and mankind from the adverse effects of global warming. The importance of the topic lies in the very fact that it provides the style as an outlook regarding the manner in which human activities have been creating a negative impact on the environment they are living into. Moreover, it brings to them a firsthand information for the first time that human beings in general are equivalently responsible for taking effective care of the nature in which they residing and therefore a regular check has to be made of the kind of activities could lead to degradation towards it. Furthermore, it creates among the students a sense of awareness regarding such a global environmental issue and the manner in which such issue have was developed as a contribution of the human society only just by mere negligence. In addition to those, it is quite significant known that the long term effects of such issues are quiet dangerous the fire if the younger generations are not able to understand and acknowledge such issues as an issue of concern then the future outcomes are definitely going to be a challenging aspect. An important element in inquiry is what is being inquired (Bai, 2021)**How does this project incorporate the inquiry cycle?**In order to complete the lesson outcome of this project, the five phases of the inquiry cycle will be used during the four days of the workshop. Under this four day workshop, the major aspects of the inquiry cycle would be addressed in a segregated format so that the fundamental objectives of the inquiry cycle could be obtaines effectively. All of this would be done by taking into consideration the standard principles of BC curriculum only. The major steps of the inquiry cycle that is interaction, clarification, design and others would be integrated into the activities of the workshop so that greater emphasis is given on the overall learning process in regards to the topic. In this way instead of memorizing the fact the students will be able to comprehend about the topic in a rationale manner. Students would collaborate to create new knowledge (Friesen & Scott, 2013) |

Key Questions For Inquiry About the Topic of Study

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| Core Question | Supporting Questions |
| What are the more significant factors in global warming? | What is global warming?What are the causes of global warming?What are the impacts of global warming?Are climate change and global warming the same thing?How can we save the earth from global warming? |



**Inquiry Approach/Style and Rationale**

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| The design thinking approach will be used in this project. Through the design thinking approach, the learners will be able to develop creative ideas on the given topic. This specific style of inquiry approach will be implemented for helping the students to develop ideas on global warming and expand their area of knowledge. |

Core Principles of Effective Teaching (Sharon Friesen)

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| **Core Principle 1:** Effective teaching practice begins with the thoughtful and intentional design of learning that engages students intellectually and academically.*\*\*How is the inquiry focused on building disciplinary knowledge and understandings?* | Through this inquiry, the learners will develop creative ideas and their learning approaches will expand and their knowledge will enrich. The students will be familiar with the question-answer session.  |
| **Core Principle 2:** The work that students are asked to undertake is worthy of their time and attention, is personally relevant, and deeply connected to the world in which they live.*\*What makes this inquiry valuable, meaningful, and “alive” for the students and teachers?* | This inquiry will be proved to be valuable, meaningful, and alive for the learners and the teachers because both will share their thoughts, ideas, and knowledge with each other. The students will be excited to know about a new topic.  |
| **Core Principle 3:** Assessment practices are clearly focused on improving student learning and guiding teaching decisions and actions.*\*How do I define learning and success in this inquiry? How is learning expressed and articulated in peer, self and teacher assessments?* | The students will be improving their concept on global warming and its future consequences. |
| **Core Principle 4:** Teachers foster a variety of interdependent relationships in classrooms that promote learning and create a strong culture around learning.*\*How do I connect students with each other, with experts in the field, with larger communities and nature, and across disciplines?* | The teach-student relationship will play a pivotal role to reach the final outcome of the concerned project. |
| **Core Principle 5:** Teachers improve their practice in the company of peers.*\*How do I reflect on the inquiry together, and/or collaborate with others?* | Teachers’ learning abilities and competencies will be developed.  |

BC Curriculum Core Competencies

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| Communication | Thinking | Personal & Social |
| The teachers will communicate purposefully with the students to reach the final outcome of the project.The teachers will participate in group discussions by effective communication skills. Students must have problem-solving skills and good communication to be able to compete and contribute in the 21st century (Dewi Poedjiastoeti and Prahani, 2017).  |  | The teachers will have a close observation of the students’ social and personal environment to understand what role the environment plays in the cognitive development of the students. Creative thinking skills and problem-solving skills were among the competencies that must be possessed by students in the 21st-century, which need to be developed through the learning process, and are still a teacher challenge to date. (Khoiriyah & Husamah, 2018) |

BC Curriculum Big Ideas (STUDENTS UNDERSTAND)

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| Geography: Global warming and its significant factors. Moral Science: Responsibilities of the human being to reduce the impact of global warming on earth and human beings. Social Studies: Moral responsibilities of human beings to save the planet from the adverse impact of global warming. |

BC Curriculum Learning Standards

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| **(STUDENTS DO)** | **(STUDENTS KNOW)** |
| Learning Standards - Curricular Competencies | Learning Standards - Content |
| Geography: Question-answers Social Science: Moral responsibilities and performance | Science: ReasoningSocial Studies: Compassion and asking questions and answering questions |

Indigenous Connections/ First Peoples Principles of Learning

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| *How will I incorporate Indigenous knowledge and principles of learning?* The teachers will develop ideas amongst the students in regards to how to develop ideas on a new topic. The students will be provided with ample chances to implement their knowledge and learning.  |

Respectful Relations

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| *How will I invite students of all backgrounds, interests and skills into the inquiry?* The teachers at first need to create a good rapport with the students and they should try to learn about the interest areas of the students and their backgrounds. Based on this information, the teachers will create lesson plans for the given topthy |

Project Overview

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| Time Estimate | Teacher and Student Activities | Assessment Activities |
| Ask | Day 1Day 2Day 3Day 4 | On the very first day of the workshop, the students will be asked to share their thoughts and ideas on global warming. The students will share why they think this topic is important for them to know.On the second day at first, the students will be provided with the opportunity to ask questions about yesterday’s activities and clear their doubts. On this day, the students will learn to understand the impacts of global warming and the basic concept of global warming and climate change.This day, students will participate in a question-answer session where they will ask questions and clear their doubts on the lessons they have learnt. The overall learning outcome will be assessed. Significant factors of global warming will be discussed on the third day.On the last day of the workshop, the continuing part of significant factors will be explained and the students will be asked questions by the tutors on their learning outcomes.  | Question-answer through a picture book. Asking questions by making a collage on the given topic. Clearing doubts on the presentation shown by the teacher. Through a short animated movie on global warming, the students will be asked to share their concepts on the given topic.  |
| Investigate | Day 1Day 2Day 3Day 4 | By using a picture book on global warming, the students will be investigated for the given topic so that they can develop ideas about global warming and its consequences.The basic similarities, differences, and interrelationships of climate change and global warming will be discussed by the educators by showing a presentation.Significant factors of global warming will be explained by the tutors through video presentations.The educator will investigate students’ learning outcomes by asking them questions on the discussed chapters.  | Classroom assessment to know the progress of the students on the topic, preparation of a project book by including pictures, short content and drawing on global warming. |
| Create | Day 1Day 2Day 3Day 4 | A collage will be created by the tutors on global warming for creating and developing in-depth ideas on the selected topic.The students will be guided to create ideas and learning about climate change and global warming by delivering lessons through PowerPoint presentations.On this day of workshop, the students will have an internal class assessment through which the teacher will be able to know how far the topic is learnt and understood by the students.On the last day, an experiment on global warming will be shown by the teacher to teach the students about the causes and impacts of global warming and its significant factors. The possible ways of mitigating the risk factors of global warming will be discussed to create an overall concept on the given topic. | Creation of own learning road map on global warming and developing own set of short experiments to show significant factors of global warming. |
| Discuss | Day 1Day 2Day 3Day 4 | Discussion on the topic through picture books and engaging the students to prepare collage on global warming. Discussion on the learning of yesterday’s class activities and continue to discuss the topic through power point presentation.A detailed discussion on significant factors of global warming through video presentation. The video presentation will contain the future consequences of global warming, its impact on this earth and on human beings, its significant factors will be explained. On this day of the workshop, the teacher and students will participate in an open discussion where the students will clear their doubts and the teacher will ask questions to the students for knowing how much they have learnt. | Students will prepare a picture book, participate in a debate on global warming. Students will conduct a demo class on the topic to demonstrate their learning and knowledge on the topic. |
| Reflect | Day 4 | On the last day of the workshop, the students will share their experience on the entire workshop and they will discuss their learning process.  | Prepare a log book of self-journal for discussing self-reflection on the four days of workshop. |

Materials and Resources (use APA citation format)

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| Picture book, short animated movies, experiments, PowerPoint presentation, projector, picture collage, notebooks, project books, set of questions, handouts |

Organizational Strategies (Optional)

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| The teachers need to handle technical issues of the machinery used. Problem-solving skills for answering students’ questions. In the context of 21st-century teaching and learning, lecturers are required to provide more complex and dynamic learning opportunities than traditional lecturing (Irwanto & AD, 2018). |

Proactive, Positive Classroom Learning Environment Strategies (Optional)

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| The teachers will listen and observe students attentively. They will give ample chances to the students to expand their area of knowledge. A positive classroom environment will be created. Self-regulated learning (SRL) refers to “an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior (Zheng & Zhang, 2020).  |

Extensions

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| The teachers might plan to take the students for an exposure observation twice a week or depending on the demand of the project.  |

Reflections (to be completed after Project Completion)

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| What did I learn about Inquiry Based Pedagogy?What challenges and successes did I experience?What would I adapt for next time?What questions do I still have about Inquiry Based Pedagogy? |

**References**

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