# Inquiry Lesson Plan 1

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| **Lesson Title:** | What are the causes of global warming? | **Lesson #** | 1 | **Date:** | 3 April,2021 |
| Name: | Nidhi Saini( T00671429) | Subject: | Environme-ntal Education | Grade: | 7th |

Lesson Rationale & Overview

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| Why does this topic matter to students?This topic is important for the students because this will enable the students to share their ideas and knowledge on global warming. The students will know how to present ideas through picture collages and picture books. Technology is radically transforming teaching and learning, as inquiry-based digital information resources and creative tools are made available to learners, schools, and educators (Chu, Reynolds, Tavares, Notari & Lee, 2021). How does this lesson fit within the larger inquiry project?In the larger inquiry project, the lesson one plan will contribute significantly to create and develop ideas amongst the students in regards to generating new ideas by using learning materials and resources like picture books and collages. . Readers will find theoretical, empirical, and pragmatic discussions on inquiry- and project-based teaching and learning approaches.How does this lesson incorporate the inquiry cycle?In the concept of design thinking, in order to demonstrate and discuss gained skills and experiences for developing cognitive, strategic, and practical processes, lesson one will provide ample opportunities to the students for developing a deep understanding of global warming. A student-centered learning approach in which students work together to address an open-ended question through inquiry and problem resolution (Muzakky, 2018).  |

Key Questions For Inquiry About the Topic of Study

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| Core Question for Inquiry Project | Supporting Question(s) in This Lesson |
| What is global warming?What are the causes of global warming?  | * Why is it important to know about global warming?
* What are the roles of human beings to reduce the negative impact of global warming?
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**Inquiry Approach/Style and Rationale**

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| In the first lesson the design thinking inquiry approach will be used. This inquiry approach will be used for helping the student to develop cognitive ideas by which the design and concept of global warming will be adopted by the students. This specific inquiry approach will be implemented because design thinking is a process for creative problem-solving. Design thinking favors creating prototypes and then testing to see how effective they are for enabling the students to test their knowledge and thinking process. |

Core Principles of Effective Teaching. Describe two or more core principles in each lesson.

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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?* | The teachers will try to engage the students by asking them questions. The teachers will help the students to develop ideas about global warming and its causes. Enhancing students’ reading interest requires an innovative method that will be applied in the classroom. Collaborative inquiry project-based learning appears as the appropriate method (Khalaf, 2018). |
| **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?* | In order to gain the attention of the students, the teachers will engage the students in the learning process. They will generate excitement amongst the students by showing them colorful pictures and collages.  |
| **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?* | In order to help the students to improve their learning skills, the teachers will conduct group discussion and judge students’ learning growth on global warming and its different reasons. The process of knowledge acquisition is carried out by a particular method that theorists called learning (Silm, Tiitsaar, Pedaste, Zacharia & Papaevripidou, 2017). |
| **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 educators need to create a good rapport with the students so that they can share their challenging areas with the teachers. The classroom environment has to be positive enough for helping the learners to develop cognitive skills on the selected topic.  |
| **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?* | Group work is a part of the learning process through which the learners will learn about group ethics, commitment and cooperative nature.  |

BC Curriculum Core Competencies

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| Communication | Thinking | Personal & Social |
| The educators are required to showcase the communication skills to the students so that they can express themselves in a systematic manner.  | Students use critical thinking to analyze and reflect on creative ideas in order to determine whether they have value and should be developed. | Personal development in regards to the given topic will be achieved when the learners of class 7 will have an idea about the concept of global warming and its various reasons.  |

BC Curriculum Big Ideas (STUDENTS UNDERSTAND)

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| Geography: The given topic is a part of learners’ subject of Geography. Moral Science: The students will develop ideas about their responsibilities to save earth from the negative impact of global warming.Social Studies: Social responsibilities, do’s and don’ts for global warming will be developed amongst the students.  |

BC Curriculum Learning Standards

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|  **(STUDENTS DO)** | **(STUDENTS KNOW)** |
| Learning Standards - Curricular Competencies | Learning Standards - Content |
| Geography: Learning skills and demonstration skillsSocial Science: A kind of responsibility will grow amongst the learners to save this planet.  | Geography: Concept of global warming Social Science: Responsibilities towards the earth and human beings |

BC Curriculum Indigenous Connections/ First Peoples Principles of Learning

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| *How will I incorporate Indigenous knowledge and principles of learning?* Traditional methods of learning will have question-answer sessions and as a part of learning principles, the learners will be able to learn how to create and maintain a perfect classroom for learning.  |

Respectful Relations: Inclusion, Personalization and Diversity

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| *How will I invite students of all backgrounds, interests and skills into the inquiry?* Understanding of students’ backgrounds, interests, and skills have to be gained by the educators. Teacher training has been suggested as an effective way to increase teachers’ motivation and readiness to adopt new approaches such as the inquiry into their teaching (PRAYOGI & YUANITA, 2018). |

Lesson Activities

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| Time Allotted | Teacher | Students | Assessment Activities |
| Invitation: Ask | 30 min. | Teachers will ask questions to the students for knowing their ideas about global warming. | The students will clear their doubts from the educators by asking questions.  | Question answer session, discussion through picture book and collage |
| Investigate  | 20 min. | The educators will investigate the development process of the students | The students will develop ideas about the given topic  | Question answer session, discussion through picture book and collage |
| Create | 30 min. | The teachers will create picture books and picture collages for the students as study materials. | The students will go through the picture books and colleges for gaining in-depth knowledge about global warming. | Group discussion and group activity of collage making |
| Discuss | 20 min. | Discussion from the teachers through group discussion. | Diction from the students during group activities.  | Group discussion and group activity of exploring ideas. |
| Reflect | 15 min. | Personal learning, experiences, challenging areas of the teachers will be explained. | The students will share their learning experience in the class. | Both the learners and the educators will share their experiences, learning, challenging areas and the most interesting areas of the project with each other.  |

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 educators have to keep in mind the final outcome of lesson one and they need to create materials and resources according to the lesson plan. The educators have to understand the various challenging areas of the students.  |

Proactive, Positive Classroom Learning Environment Strategies (Optional)

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| The teachers will create a positive classroom environment for the students of class 7 and they will encourage the students to share their thoughts, concepts, ideas on global warming and its different reasons. The importance of building up a positive attitude in the classroom will be examined by the teachers. The environment of the classroom needs to be flexible and cooperative.  |

Extensions

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| For the purpose of gaining adequate knowledge on global warming, the teachers can take the students out for an exposure visit. The teachers can conduct seminars and debates on the given topic.  |

Reflections (to be completed after the Lesson Demonstration ONLY)

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| The teachers’ reflections can be presented in this way, that they enjoyed the lesson one because they were able to engage the students in activities. The students enjoyed the class because they liked the study materials and responses used by the educator.  |

**References**

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