**PROJECT PLANNER**

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|  **PROJECT GOALS**:  |
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| **Big Ideas**/**Enduring Understandings**: What big ideas or real-world dilemmas will drive this project? | **Subject(s)**: How can interdisciplinary subjects be incorporated into this project? |
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| **Standards[[1]](#endnote-1)**: What state, national, or local standards are important to know? |
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| **Essential Questions (EQs)**: What essential questions will drive the project? How will societal issues (preferably local issues that are meaningful to the student audience) be integrated? It is beneficial to plan EQs with your students but it is usually helpful to have some ideas planned previously. |
| **STEM EQs:****Science and Society EQs:** In what ways are science and society interwoven?* Who are the stakeholders in the dilemma? What do they have to say?
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| **KNOWLEDGE AND SKILLS**: What core knowledge, science practices, and cross cutting concepts will students learn from this project? |
| **Core Ideas & Concepts**: What will students know or need to know? | **Practices**: What scientific practices will students develop over time? | **Cross Cutting Concepts:** What concepts have applications across all the science domains? (i.e. Patterns, similarity, and diversity; cause and effect; scale, proportion and quantity; systems and system models; energy and matter; structure and function; stability and change,) |
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| **Other skills and practices (i.e. Habits of Mind)** |
| * **Techniques for managing and organizing information:** How do we best stay organized and site sources? How do we maintain confidentiality around sensitive, politically charged issues?
* **Techniques for collaboration:** How do we work with peers and community members who may have different opinions, work ethics, and ideas?
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| **ASSESSMENT:** What is the desired result and how will students know when they have reached it? What is acceptable evidence? What data, measurements, and survey information might be useful?  |
| **PERFORMANCE TASKS**: It is helpful to determine useful tasks that might shed light on the research questions. | **OTHER EVIDENCE** to assess student learning may include some of the following activities and tasks. |
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| **BUILD THE PROJECT**: How will the project experiences be developed? What are the milestones and due dates for completion? How will the needs of all students be met? |
| **PROJECT DESCRIPTION**: What is the background and context of the project? What is the relevancy of the project? What is the authentic problem being addressed? | **CREATE BUY-IN**: How can you hook your students? What would create buy-in? Who might they get involved with that is an expert in this field? |
| **Design a project outline in collaboration with students:** What are the milestones and specific tasks that students will complete? |
| **1. EARLY-ON:****2. MIDWAY:** **3. END OF PROJECT:****CONSIDER:** Who might get involved with that is an expert in this field? Remember to emphasize problem posing, problem solving, and other tasks in the design.List preparations necessary to address needs for differentiated instruction and diversity. List reflection and evaluation techniques. Develop project rubric that assesses project outcomes. |

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| **CURRICULUM PROJECT RESOURCES** |
| **Student Literature & Texts** | **Materials & Field Trips** | **Web sites & Technology** |
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| **PLAN LEARNING OPPORTUNITIES AND SEQUENCE INSTRUCTION:** What learning experiences will be needed to demonstrate the key knowledge and skills for this project?  |
| **Week 1** | **Week 2** | **Week 3** |
| **Week 4** | **Week 5** | **Week 6** |

\* Adapted from the Buck Institute of Education Project Planner - www.bie.org/project\_planner and Wiggins and McTighe, 2005.

 Vermont Department of Education 2004 Science Grade Expectations for Vermont’s Framework of Standards.

 NRC Next Generation Science Standards.

1. [↑](#endnote-ref-1)