Milltown Integration Plan

Please use this template to plan strategies for fostering an interdisciplinary approach by integrating STEAM concepts into your grade.

Teacher(s): S. Marino

Grade(s): 5th

Subject Area(s): Language Arts, Math, Science, Social Studies

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Common Practices Plan:

When do you anticipate implementing key common practices with your students? Please list a unit / topic, as well as an approximate time of year by month or marking period using the table below.

Common Practice to implement:	Unit / Topic that will be used for Implementation:	Approximate time of implementation:
Teaching with Stations Challenging students to work through different labs, activities, or experiments in stations is a great way to promote creative thinking and problem-solving, as well as foster collaboration among students.	Math: Students work in stations through the math lesson integrating technology in a lesson, as well as small group instruction, independent practice and group games. Using stations helps the students interact with different ways to learn the same information.	40 minutes per day, twice a week. Topics 1-16
Project-Based Learning Project-Based Learning describes activities that allow for students to demonstrate their knowledge through the creation of a project as an assessment.	SS/Science: Students create slides, posters, brochures to demonstrate their understanding of the concepts learned in each subject.	160 minutes, at the end of a unit Unit: Regions Unit 1a Unit: Chapter 4 Life in the Colonies Unit 2b
Problem-Based Learning Problem-based learning describes instruction based around the utilization of a design process, sometimes called an engineering design process, or design loop.	Language Arts/SS: Students will research a topic and write a five paragraph essay	160 minutes, once a year

	outlining the importance of their topic and how their topic relates to their lives. Students will be utilizing the writing process to help formulate their paragraphs.	Unit: SS Chapter 5 Unit 3 LA: Expository Writing
Visual Brainstorming Utilizing sketches, diagrams, or flow charts to allow for students to brainstorm different ideas, and choose optimal and appropriate ideas based on project details.	Science/SS: Students label diagrams and various maps throughout the topics to gain understanding of the topics that are being discussed and how different parts of the diagram and maps interact with one another	15 minutes, approximately twice a week Science: Chapter 4 SS: Chapter 1-2 Unit 1b-1c
Experimentation Through this, students should be supported in testing different ideas safely as they work to find the best approach, or a possible answer to a problem.	Science: Students will go to Science Lab every week to explore the topics learned in science in a hands-on approach using the Scientific Method. Students will use this time to make mistakes and reflect on them to fully understand the topics being discussed and reviewed.	40 minutes per week. Science: Chapter 1, 4, 5, 6
Reflection / Redesign Regardless of how big a project is, students should always have the opportunity to consider how they would improve or make changes based on what they have learned.	Language Arts: While students are writing a process piece, students are instructed to go back through their work and fix errors that they made. They are instructed on reading other's pieces, giving feedback, then going back to their essay to determine how to make their piece better	80 minutes, four times a year LA: All writing pieces
Creating Real-world Connections With this, we want to provide students with a possible reason as to why they need to know this, or who out in the world uses this knowledge everyday.	Math: students create a vacation plan with a budget and various boundaries that they have to stay within to plan a realistic way of travel	160 minutes, once a year End of year activity

	with the parameters set.	
Foster Design Thinking Inquiry based learning through the implementation of a problem solving process in order to develop a model or solution to a proposed problem.	Math: Students identify and use the mathematical strategy that is most effective for the topic.	2 minutes, every day All math topics
Promoting Empathy As you choose real-world connections, relatable experiences, and constraints for your projects, challenge students to design solutions to help others.	Social Studies: Students work in groups on a project on exploring different regions, which gives them a chance to communicate and share opinions and ideas with one another while working together to achieve a common goal.	240 minutes, once a year SS: Regions Unit 1a
Support EDI Equality, Diversity and Inclusion is an important aspect to ensure fair treatment and opportunity for all. It aims to eradicate prejudice and discrimination on the basis of an individual or group of individual's protected characteristics.	Social Studies: Students will learn about various people around the world, such as explorers, and people in North America and gauge how they treated each other and how they could change past societies to be more equitable.	3x a unit, 5 times a year SS: Chapter 2 Unit 1c

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Interdisciplinary Project Plan - MP1 / MP2

Using the table below, plan and describe an opportunity for a larger-scale interdisciplinary project to take place in your classes.

Subject / Grade:	Science / 5th
When will this project take place?	January MP 2
Describe the project, what is the main idea?	Students will be working on a project exploring a specific ecosystem, looking for producers, consumers, and decomposers and exploring their interactions with the environment.
What will students	Students will be challenged to research the different parts of the

be challenged to produce?	ecosystem to demonstrate their understanding of the reactions within the ecosystem. Students will use their knowledge of their ecosystem to write a paragraph about the interactions in their ecosystem and if there are any environmental problems within their environment. Students will peer edit other's paragraph
List common practices that will be incorporated:	Teaching in Stations: students work on activities related to interactions in their ecosystem within the unit lessons Project Based Learning: Students will create a diorama, poster, or slides to teach others about their ecosystem Visual Brainstorming: Students will be labeling food webs that happen within their ecosystem Experimentation: Students will be working on hands on activities within science lab to further deepen their understanding of their ecosystem Reflection/Redesign: Students will read others' paragraphs and give suggestions. The students will fix their paragraph with what they learned from other students Creating real world connections: Students are looking into real world environmental problems within their ecosystem Promoting Empathy: Students are looking into real world environmental problems within their ecosystem and coming up with ways that humans can help their ecosystem
List areas where EDI (Equality, Diversity and Inclusion) took place throughout this activity.	During the project, students will be learning about different ecosystems throughout the world. These ecosystems impact the culture of the surrounding people in various ways. Students will look into how the ecosystem creates differences around the world such as what kind of food the people eat and what kind of resources come from their ecosystem.