UB LESSON PLAN FORMAT

Date: March 18, 2025

Subject: Science

Class: Standard 2

Topic: Science and Scientists

Sub-topic: Types of Scientists

Time: 50 minutes (1:00–1:50)

Materials:

- **Nearpod activities**: Interactive slides on "Types of Scientists," including collaborative boards and quizzes.
- **Concept chart**: A colorful graphic organizer categorizing scientists based on their fields (e.g., biologists, physicists, chemists).
- **Pictures of scientists**
- **Bristol boards**

References:

- Textbook: *"Young Explorers in Science," Page 45–48.*
- Video: *"Who Are Scientists?"* (YouTube link:[https://www.youtube.com/watch?v=psGtWJTfuSQ])

Previous Knowledge: Students are familiar with the basic concept of science and understand that scientists study the world.

Content Standard: Science Standard: Understanding the contributions of scientists and their role in society.

Learning Outcomes: SC 1.01: Students will discuss what scientists are and what they do.

Competency:

- **Competency Area #3**: Critical and Innovative/Inventive Thinking – Students will research different types of scientists.
- **Competency Area #4**: Collaboration – Students will define and differentiate between types of scientists in pairs.
- **Competency Area #6**: Digital Literacy – Students will use technology to watch and reflect on a video.

Disposition: Students will appreciate and respect the contributions of different types of scientists to society.

Objectives

- **Cognitive**: Students will identify at least 6 out of the 7 different types of scientists and describe their work.
- **Affective**: Students will express curiosity and enthusiasm about the work of scientists through given pictures.
- **Psychomotor**: Students will collaboratively complete a matching activity of scientists to their contributions with 90% accurately.

Content/Concepts: **Scientist:**

A person who asks questions and tries different ways to answer them. A scientist learns by using their 5 senses. They notice details; draw what they see; write about what happens; make comparisons by measuring. Scientists design experiments to test predictions; experiments by trial and errors; think logically. As a scientist keeps trying over and over; they have fun.

Types of Scientist	Description of Studies
Archeologist	Studies about the remains of ancient people, their bones and their belongings.
Astronomer	the universe that includes outer space, sun, moon stars and planets
Botanist	A scientist who studies plant life.
Geologist	Studies rocks and land. Rocks, minerals and earth's landform.
Meteorologist	Studies about the atmosphere and weather.
Oceanographer	Studies oceans and marine life which includes the sea floor.
Zoologist	Studies about animal's life.

Skills

- Organizing information on a chart.
- Comparing and contrasting different types of scientists.
- Collaborating to create a visual representation of knowledge.

Attitudes

- Show respect for the contributions of scientists to the world.
- Demonstrate curiosity about how scientists impact society.

Linkages

- **Science**: Research on types of scientists.
- **Technology**: Digital literacy through video-based learning.
- **Art**: Creative poster design during group work.

Introduction (5 minutes)

- Start with a question: "What do you think a scientist looks like? What do they do?"
- Use a drawing board in Nearpod https://nearpod.com/library/preview/lesson-L156729191 , and ask students to draw using the pencil and marker icons, how they picture scientists.
- Use name sticks to call on students to share their drawings.

Development (30 minutes)

- **Activity 1: Digital Learning (15 minutes)**
- Show a detailed video on "Types of Scientists." Pause the video intermittently to discuss examples like a biologist studying animals, a physicist exploring space, etc.
- **Activity 2: Collaborative board (Near pod) (5 minutes)**
- **Think**: Individually, students list one scientist they know and their fields in the slot provided in Nearpod. https://nearpod.com/library/preview/lesson-L156729191
- **Pair**: In pairs, they share their lists and note similarities/differences.
- **Share**: Pairs present their findings to the class.

· **Activity 3: Poster Creation (10 minutes)**

- Provided with pictures of scientists:
- In groups of four, students categorize types of scientists on a poster using the concept chart.
- Groups present their posters in a gallery walk format.

21. Closure: (5 minutes)

- Summarize the lesson by asking students:
    1. "What surprised you the most about the types of scientists?"
    2. "Which type of scientist would you want to be?"

22. Conclusion: (10 minutes)

- Nearpod activity: (authentic assessment): Students will complete a matching activity on the 7 different types of scientist to their contributions. https://nearpod.com/library/preview/lesson-L156729191

23. Extended Activity

- Assignment: Students research a famous scientist and write a short paragraph with a drawing of their chosen scientist. Follow the sample format: (e.g., name, field, why they are famous) for your paragraph writing.

24. Lesson Reflection / Evaluation

Strengths:

Weaknesses:

Suggestions:

Group Members: Cleydy Caal, Tricia Coc, Nermida Spain

Lesson Plan Evaluation

Name: Nermida Spain

Topic: Science and Scientist

Subtopic: Types of Scientists

Class Level: Standard 2

Learning Outcome: SC 1.01: Students will discuss what scientists are and what they do.

Objectives: After viewing a video, information chart and engaging in activities, students will be able to:

1. **Cognitive**: Students will identify at least 6 out of the 7 different types of scientists and describe their work.

2. **Affective**: Students will express curiosity and enthusiasm about the work of scientists through given pictures.

3. **Psychomotor**: Students will collaboratively complete a matching activity of scientists to their contributions with 90% accurately as well as participate in the "Time to Climb" activity, answering at least 7 out of 8 questions about the types of scientists.

Strengths:

In this lesson, we utilized the NearPod platform, which effectively engaged participants in various activities centered around the subtopic "Types of Scientists." Activities included "Draw It," where participants illustrated their perceptions of a scientist. In the second activity, they used a collaborative board to type the name and description of a scientist mentioned in a video shown earlier. The third activity involved a "Matching Pairs" game, in which participants matched images of different scientists with their corresponding names and descriptions. The final activity

was a competitive "Time to Climb" game, where participants answered eight questions. Additionally, images of seven types of scientists were presented, prompting participants to provide descriptions based on what they observed. Throughout the lesson, presenters ensured full student involvement. By the end, participants enjoyed the lesson and were able to create an informational chart titled "Who is a Scientist," incorporating details from the video and the images presented.

Weaknesses:

The introduction of the lesson did not proceed as planned. Instead of inviting students to close their eyes and visualize a scientist, the presenter posed two unrelated questions before asking them to draw. Furthermore, the lesson objectives, although displayed on a slide, were not articulated by the first presenter. Another weakness was the choice of video; feedback indicated it was boring, a sentiment I share. Although images of scientists were shown for discussion, a chart illustrating "Types of Scientists" would have reinforced the video content and lesson material more effectively.

Recommendations:

My primary recommendation is to consider participant feedback and make necessary adjustments. A more suitable, child-friendly video should be selected. Additionally, incorporating a concept chart would enhance understanding. Clear instructions must be provided for navigating NearPod activities. Finally, when teaching online, I will ensure my camera is functional and turned on.