Appendix 11: Implementation Form for Professional Development Activities (Summer and School Year)

**Summer of Innovation Teacher PD Summer and School-Year Level Implementation Form**

The National Aeronautics and Space Administration (NASA) is conducting a national evaluation of its Summer of Innovation (SoI) Program. Abt Associates Inc. and its partner the Education Development Center have been hired to conduct this study.

This form is intended to document the implementation of the SoI teacher professional development offerings across the awardee sites. All SoI awarded PIs are required to designate an individual(s) to complete this form at the end of any teacher professional development activities/sessions that occur between the months of June and March. This form is to be submitted to the national evaluation team within two weeks of the last day of EACH professional development activity/session.

You have been asked to complete this form based on your role in the SoI professional development activities. Completing this form will help NASA understand awardees’ efforts with classroom teachers this summer and during the school year. We estimate that it will take approximately 10 minutes to complete this form.

If you have questions about this evaluation, please contact the evaluation director, Hilary Rhodes of Abt Associates Inc. at (877) 520-6840 (toll-free) or send an email to NASASummerofInnovation@abtassoc.com. You may also contact the evaluation’s program officer at NASA Brian Yoder (Brian.Yoder@nasa.gov).

A. Professional Development (PD) Information

|  |  |
| --- | --- |
| **Date(s) of this PD session** |  |
| **Number of PD days for this session** |  |
| **Hours per day** |  |
| **Total number of PD hours focused on NASA content** |  |

B. Content

1. Which of the following SoI content themes was addressed during this PD session?
	* Earth & Space Science IF SELECTED, ASK QUESTION 2.
	* Engineering IF SELECTED, ASK QUESTION 3.
	* Life Science IF SELECTED, ASK QUESTIONS 4.
	* Physical Science IF SELECTED, ASK QUESTIONS 5.
2. Which Earth & Space Science units were addressed? Select one or more.
	* Climate and Seasons IF SELECTED, ASK:

Which *Climate and Seasons* lessons were presented? Select one or more.

Climate

Seasons

* + Destination Mars
	+ Earth Moon System IF SELECTED, ASK:

Which *Earth Moon System* lessons were presented? Select one or more.

Earth’s Attic

The Sky is Falling

* + Planetology IF SELECTED, ASK:

Which *Planetology* lessons were presented? Select one or more.

How Does Earth Compare?

Earth-like Planets

Earth – One of a Kind Planet

* + Remote Sensing IF SELECTED, ASK:

Which *Remote Sensing* lessons were presented? Select one or more.

Impact Cratering

A World of Change

Earth vs. Mars

* + Universe IF SELECTED, ASK:

Which *Universe* lessons were presented? Select one or more.

Is It Safe?

What’s in the Stars?

Points of Light

* + Weather IF SELECTED, ASK:

Which *Weather* lessons were presented? Select one or more.

Air has Weight

Moisture and Clouds

Nice Atmosphere

* + Year of the Solar System IF SELECTED, ASK:

Which *Year of the Solar System* lessons were presented? Select one or more.

Comet on a Stick/Cooking up a Comet

Make a Comet and Eat it

Scale Models of the Solar System

Solar System Simulator

Solar System Missions

Vegetable Light Curves

The United States at Night

Space Rocks! Meteorite Game

1. Which Engineering units were addressed? Select one or more.
	* Aeronautics IF SELECTED, ASK:

Which *Aeronautics* lessons were presented? Select one or more.

Beginners Guide to Aeronautics

The Wright Way to Fly

Getting off the Ground into the Smart Skies

Getting the Drop on Flight with the X Planes

* + Challenges IF SELECTED, ASK:

Which *Challenges* lessons were presented? Select one or more.

Touchdown

On Target

Spacecraft Structures

Thermal Protection Systems

Electrodynamic Propulsion

* + Design Process IF SELECTED, ASK:

Which *Design Process* lessons were presented? Select one or more.

Spaghetti Anyone: Designing with Pasta

Space Place: Make a Balloon Powered Nanorover

Project X51 Water Rocket

Solar Oven

Mars Pathfinder Egg Drop

Lunar Plant Growth Chamber

NASA Student Glovebox

Water Filtration System

* + Exploration IF SELECTED, ASK:

Which *Exploration* lessons were presented? Select one or more.

NASA Mission Simulator

Moon Rovers

Crew Exploration Vehicle

Landing a Rover

* + Robotics IF SELECTED, ASK:

Which *Robotics* lessons were presented? Select one or more.

Using Robotics

Robotics: Hands Down!

Heavy Lifter

* + Rocketry IF SELECTED, ASK:

Which *Rocketry* lessons were presented? Select one or more.

Heavy Lifting

Nose Cone Aerodynamics

Ride the Wind: Compressed Air Rocketry

1. Which Life Science units were addressed? Select one or more.
	* Body IF SELECTED, ASK:

Which *Body* lessons were presented? Select one or more.

Train Like an Astronaut

Brain in Space

Space Adaptations

* + Food
	+ Life Out There? IF SELECTED, ASK:

Which *Life Out There* lessons were presented? Select one or more.

Search for Life on Other Worlds

Search for Life On Other Worlds: Observing and Classifying Life

Astrobiology: Science Learning Activities for Afterschool

Chains Games

It’s Just Right

The Shape of Things and from the Outside

The Suns Habitable Zone

What Can Life Tolerate

* + Plants IF SELECTED, ASK:

Which *Plants* lessons were presented? Select one or more.

Light Effects On Plant Behavior

Have Seed Will Travel

Living Clocks

Gravitropism- How do Plants "know" Which Way to Grow?

* + Survival IF SELECTED, ASK:

Which *Survival* lessons were presented? Select one or more.

Cool Spacesuits

Field Trip to the Moon

Survival in the Environment of Space

1. Which Physical Science units were addressed? Select one or more.
	* Aeronautics IF SELECTED, ASK:

Which *Aeronautics* lessons were presented? Select one or more.

Bag Balloon

Four Forces of Flight

Jet Propulsion

Air Foils

Designing Aircraft in 5 Easy Steps

Future Flight Design

Bernoulli and More Bernoulli

Fluttering Fun, Points of Balance

Controlling the Plane

* + Force and Motion IF SELECTED, ASK:

Which *Force and Motion* lessons were presented? Select one or more.

Danger: Space Debris

Inertia and Friction

Thrust and Acceleration

Projectile Flight

* + Properties of Matter IF SELECTED, ASK:

Which *Properties of Matter* lessons were presented? Select one or more.

States of Matter

Hidden Properties

NASA Student Glovebox

Nature of Salt

Antacid Tablet Race

* + Waves and Optics IF SELECTED, ASK:

Which *Waves and Optics* lessons were presented? Select one or more.

Wave Measurement

Manipulating Electromagnetic Waves

Making Use of the Electromagnetic Spectrum

* + Gravity IF SELECTED, ASK:

Which *Gravity* lessons were presented? Select one or more.

Gravity Games

Fighting Gravity – A matter of balance

Heavy Duty Topics

C. Attendance

Note: these questions will differ depending on the length of the PD sessions.

IF THE PD SESSION WAS OFFERED FOR ONE DAY OR LESS (PER RESPONSE IN A)

|  |  |
| --- | --- |
| **Number of classroom teachers enrolled** |  |
|  | + |
| **Number of informal educators (e.g., youth development leaders, museum curators) enrolled** |  |
|  | + |
| **Number of others enrolled (e.g., undergraduate students)** |  |
|  | = |
| **Total number enrolled in this PD session** |  |

|  |  |
| --- | --- |
| **Number of classroom teachers attending** |  |
|  | + |
| **Number of informal educators attending** |  |
|  | + |
| **Number of others attending (e.g., undergraduate students)** |  |
|  | = |
| **Total number attending this PD session** |  |
|  |  |
| **Total number of classroom teachers in this session who attended a previous PD session** |  |
| **Total number of informal educators in this session who attended a previous PD session** |  |

IF THE PD SESSION WAS OFFERED FOR MORE THAN ONE DAY:

|  |  |
| --- | --- |
| **Number of classroom teachers enrolled** |  |
|  | + |
| **Number of informal educators enrolled** |  |
|  | + |
| **Number of others enrolled (e.g., undergraduate students)** |  |
|  | = |
| **Total number enrolled at this PD session** |  |

|  |  |
| --- | --- |
| **Number of classroom teachers at start of this PD session** |  |
|  | + |
| **Number of informal educators at start of this PD session** |  |
|  | + |
| **Number of others at start of this PD session (e.g., undergraduate students)** |  |
|  | = |
| **Total number at start of this PD session** |  |

|  |  |
| --- | --- |
| **Number of classroom teachers at end of this PD session** |  |
|  | + |
| **Number of informal educators at end of this PD session** |  |
|  | + |
| **Number of others at end of this PD session (e.g., undergraduate students)** |  |
|  | = |
| **Total number at end of this PD session** |  |
|  |  |
| **Total number of classroom teachers in this session who attended a previous PD session** |  |
| **Total number of informal educators in this session who attended a previous PD session** |  |

D. NASA Support Tools

|  |
| --- |
| **NASA educational materials used during this PD session (choose all that apply):** |
| [ ]   | **Video** |
| [ ]   | **Activity Demonstration** |
| [ ]   | **Toolkit, NASA websites** |
| [ ]   | **Online learning resource** |
| [ ]   | **NASA equipment** |
| [ ]   | **Exhibits** |
| [ ]   | **Learning games** |
| [ ]   | **Other, please specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |

|  |
| --- |
| **Comments:** |