

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 (Sol) 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 Sol teacher professional development offerings across the awardee sites. All Sol 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 Sol 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 Sol 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

3. 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
- Electrodynamics 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

4. 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 Sun's 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

5. 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):	
<input type="checkbox"/>	Video
<input type="checkbox"/>	Activity Demonstration
<input type="checkbox"/>	Toolkit, NASA websites
<input type="checkbox"/>	Online learning resource
<input type="checkbox"/>	NASA equipment
<input type="checkbox"/>	Exhibits
<input type="checkbox"/>	Learning games
<input type="checkbox"/>	Other, please specify: _____

Comments: