NIST Summer Institute: Post-survey for Non-participants [insert school year]

Please take the time to complete this survey on your experience as a teacher during the current school year. Your feedback is truly valuable to the administrators of the NIST Summer Institute program and the data will be kept strictly confidential. Data will be used solely for the overall evaluation of the program and program improvement purposes.

Teachers who complete the survey will receive a $25 gift card from amazon.com in appreciation for their time. The survey should take 20 minutes to complete.

If you have any questions, please contact **Melissa Bryce** at Westat. She can be reached by phone at (240) 3142588 or by email at Melissabryce@westat.com.

OMB Control No. 06930033
Expiration Date: 02/29/2012

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Teacher Consent Form

As part of the evaluation of the NIST Summer Institute, Westat, the program's external evaluator, is conducting this survey to document the teaching practices and beliefs of program applicants.

Participation in this activity is voluntary, but the information gained from the survey will be of great value to NIST as it refines its program to best meet the needs of middle school science teachers. Information collected through the survey will be strictly confidential and used solely for research purposes. Only aggregate findings will be included in the final report. No findings will be connected to individual teachers. The information collected will not be shared with other school personnel or used as part of a performance evaluation.

1. If you agree to participate in the survey, please check the following box and complete the survey.

☐ I have read the information on this screen and understand what my participation involves. I consent to participating in the survey as part of the NIST evaluation.

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2.Please enter your ID number in the space below (your ID number can be found in the email with the link to this survey).

ID Number: _____

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3. In what grade did you spend the majority of your time teaching science during the current school year? *(Select one.)*

- 6th grade
- 7th grade
- 8th grade

4. If you taught science to more than one grade during the current school year, select all additional grades that apply.

- 6th grade
- 7th grade
- 8th grade
- I did not teach science to any additional grades

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5. Which subject areas did you cover in your science classes during the current school year? *(Mark one response on each line.)*

	Subject covered	Subject not covered
a. Biology	n	n
b. Earth Science	m	m
c. Space Science	n	n
d. Physics	m	m
e. Chemistry	n	n
f. Weather	m	m
g. Metrology*	n	n

***Metrology**: is the science of measurement, embracing both experimental and theoretical determinations at any level of uncertainty in any field of science and technology. Scientific or fundamental metrology concerns the establishment of quantity systems, unit systems, units of measurement, the development of new measurement methods, realization of measurement standards and the transfer of traceability from these standards to users in society. Applied or industrial metrology concerns the application of measurement science to manufacturing and other processes and their use in society, ensuring the suitability of measurement instruments, their calibration and quality control of measurements. Legal metrology concerns regulatory requirements of measurements and measuring instruments for the protection of health, public safety, the environment, enabling taxation, protection of consumers and fair trade.

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6. How prepared are you to link scientific concepts to realworld applications for each of the subject areas listed below. ***(Mark one response on each line.)***

	Not prepared	Somewhat prepared	Moderately prepared	Very well prepared
a. Biology				
b. Earth Science				
c. Space Science				
d. Physics				
e. Chemistry				
f. Weather				
g. Metrology*				

***Metrology**: is the science of measurement, embracing both experimental and theoretical determinations at any level of uncertainty in any field of science and technology. Scientific or fundamental metrology concerns the establishment of quantity systems, unit systems, units of measurement, the development of new measurement methods, realization of measurement standards and the transfer of traceability from these standards to users in society. Applied or industrial metrology concerns the application of measurement science to manufacturing and other processes and their use in society, ensuring the suitability of measurement instruments, their calibration and quality control of measurements. Legal metrology concerns regulatory requirements of measurements and measuring instruments for the protection of health, public safety, the environment, enabling taxation, protection of consumers and fair trade.

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7. How important are each of the following teaching practices to you as a science teacher.

(Mark one response on each line.)

	Not Important	Somewhat Important	Moderately Important	Very Important
a. Using realworld examples to introduce science concepts				
b. Using realworld examples to motivate student interest in science				
c. Connecting new science concepts to previous science concepts				
d. Creating analogies for scientific concepts				
e. Addressing students' misconceptions				
f. Having students collect data				
g. Providing direct instruction to help students understand a scientific concept				
h. Asking students to compare the results of an experiment to their original predictions				
i. Asking students to explain their conclusions and/or reasoning				
j. Increasing student interest in science careers				
k. Increasing student interest in the role of science in everyday life				

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8. What is your level of preparedness to use the following teaching practices in your classroom. ***(Mark one response on each line.)***

	Not prepared	Somewhat prepared	Moderately prepared	Very well prepared
a. Using realworld examples to introduce science concepts				
b. Using realworld examples to motivate student interest in science				
c. Connecting new science concepts to previous science concepts				
d. Creating analogies for scientific concepts				
e. Addressing students' misconceptions				
f. Having students collect data				
g. Providing direct instruction to help students understand a scientific concept				
h. Asking students to compare the results of an experiment to their original predictions				
i. Asking students to explain their conclusions and/or reasoning				
j. Increasing student interest in science careers				
k. Increasing student interest in the role of science in everyday life				

9. Approximately how often did you have <u>students</u> engage in the following learning activities during the current school year? *(Mark one response on each line.)*

	Weekly	Monthly	Annually	Never
a. Conduct investigations (e.g., doing lab activities or using manipulatives)	n	n	n	n
b. Consider a realworld problem relevant to the course and develop a plan to address it	m	m	m	m
c. Use technical passages (from news or science journals) to investigate current issues or new developments in science or technology	n m	n m	n m	n m
d. Listen to guest speakers	m	m	m	m
e. Go on field trips relevant to the curriculum	n	n	n	n
f. Investigate possible career opportunities in mathematics, science, or technology	m	m	m	m
g. Design and implement their own scientific investigation	n	n	n	n
h. Use “stateoftheart” equipment or technologies	m	m	m	m

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10. Consider only science teachers <u>within</u> your school: How often did you do the following with them during the current school year? *(Mark one response on each line.)*

	12 times a week	12 times a month	12 times a year	Never
a. Discuss general ideas for how to teach specific science concepts	m1 j	m1 j	m1 j	
b. Share a specific science lesson that was very effective for teaching a concept	m1j	m1j	m1j	
c. Share strategies for making science accessible to all students	m1 j	m1 j	m1 j	
d. Have my classroom observed by other science teachers to demonstrate how to teach a specific science lesson, activity, or concept	m1j	m1j	m1j	
e. Demonstrate a specific science lesson, activity, or concept for students in another teacher's classroom	m1 j	m1 j	m1 j	

11. Consider only science teachers <u>outside</u> your school: How often did you do the following with them during the current school year? *(Mark one response on each line.)*

	12 times a week	12 times a month	12 times a year	Never
a. Discuss general ideas for how to teach specific science concepts	m1 j	m1 j	m1 j	
b. Share a specific science lesson that was very effective for teaching a concept	m1j	m1j	m1j	
c. Share strategies for making science accessible to all students	m1 j	m1 j	m1 j	
d. Have my classroom observed by other science teachers to demonstrate how to teach a specific science lesson, activity, or concept	m1j	m1j	m1j	
e. Demonstrate a specific science lesson, activity, or concept for students in another teacher's classroom		m1j	m1 j	
		m1 j	m1 j	
		m1 j		

12. When you had a science-content question related to your teaching responsibilities

during the current school year, how often did you use the following information sources to obtain answers? ***(Mark one response on each line.)***

	12 times a week	12 times a month	12 times a year	Never
a. A teaching colleague within my middle school				
b. A teaching colleague at another middle school				
c. A science supervisor from within my school district				
d. Someone from a professional science teaching organization (e.g., NSTA)				
e. A professional scientist of my acquaintance (e.g., a former professor)				
f. My school district's science website				
g. My state's science website				
h. A targeted Google search				
i. A federal agency website (e.g., NSF, NASA, NOAA, NIST)				
j. Specific science websites (e.g., Why Files, Exploratorium)				
k. Other				

13. If you selected "Other" in Question 12, please specify the "Other" information source(s)

in the space below:

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14. Indicate the extent to which you agree or disagree with each of the following statements for the current school year. ***(Mark one response on each line.)***

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. The quality of my teaching influences my students' interest in science				
b. The quality of my teaching influences my students' achievement in science				
c. I continually find better ways to teach science				
d. I know how to motivate my students to learn science				
e. I influence the quality of science instruction for students outside of my own classroom				
f. I am currently in a position to influence the number of my students that know about sciencerelated careers.				
g. I am currently in a position to influence the number of my students that find STEM subjects interesting.				
h. I am currently in a position to influence the number of my students that view science as being relevant to their lives.				

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If you are not finished with the survey, select the "Previous" button to navigate the survey and complete your responses.

If you are ready to submit your survey now, select the "Done" button. After you submit, you will NOT be able to reenter the survey.