

National Institute of Standards and Technology (NIST) Summer Institute Customer Satisfaction Survey

Thank you for your time in completing this survey on your experience participating in NIST's Summer Institute program in June 2008. Your feedback is truly valuable to the administrators of the 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.

The survey should take 60 minutes to complete.

Teachers who complete the survey will receive a \$50 gift card from [TBD] in appreciation for their time.

Please return your survey by [TBD], 2009.

Completed surveys may be returned to Westat by fax, mail, or email.

By fax: Melissa Bryce (240) 314-2588

By mail: Melissa Bryce, Westat, 1650 Research Blvd.,
TA 2043, Rockville, MD 20850

By email: Melissabryce@westat.com

If you have any questions, please contact **Melissa Bryce** at Westat. She can be reached by phone at (240) 314-2588 or by email at Melissabryce@westat.com.

NOTE: This questionnaire contains collection of information requirements subject to the Paperwork Reduction Act (PRA). Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB Control Number. The estimated response time for this questionnaire is 60 minutes. The response time includes the time for

reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this estimate or any other aspects of this collection of information, including suggestions for reducing the length of this questionnaire, to the National Institute of Standards and Technology, Attn., Susan Heller-Zeisler, szeisler@nist.gov, 301-975-3111.

Instructions:

- Save this file to your computer’s desktop or a non-temporary folder. Click on the box on each line that indicates your response. You can uncheck a response by clicking on the box a second time. There are no limits to the amount of narrative you can type into the text boxes.
- Please type in your full name and your school name in the text boxes below. (Note - Your individual survey responses will be only be seen by Westat staff. Your individual responses will not be shared with MCPS or NIST or linked to your name in the final report. The final report will provide an overview of the NIST Summer Institute Program.)

Name:	
School:	

1. Approximately how often did you use each of the following teaching methods or try to accomplish the following objectives during the 2008-09 school year? (Mark one response on each line.)

	Never	1-2 times a year	1-2 times a month	1-2 times a week	Almost every class	Every class
a. Lecture or talk to the whole class	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
b. Teacher-led whole class discussion	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
c. Student-led whole-group discussions or presentations	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
d. Show the importance of the subject in everyday life	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
e. Teach facts, rules, or vocabulary	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
f. Prepare students for taking standardized tests in science-related topics	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
g. Increase students’ interest in taking additional science courses	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
h. Encourage students to explore alternative explanations or methods for solving problems	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
i. Understand the theoretical	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶

concepts and ideas
underlying scientific
applications

- | | | | | | | |
|--------------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| j. Have students work individually on inquiry projects | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| k. Have students work together in cooperative groups | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| l. Review homework or other assignments | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |

2. **Approximately how often did you have students engage in the following learning activities during the 2008-09 school year?** (Mark one response on each line.)

- | | Never | 1-2 times a year | 1-2 times a month | 1-2 times a week | Almost every class | Every class |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| a. Conduct investigations (e.g., doing lab activities or using manipulatives) | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| b. Reflect on course material by writing in a notebook or journal | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| c. Write responses to BCR items | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| d. Use calculators or computers for learning, practicing skills, or solving problems | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| e. Work individually on written work or assignments in a workbook or textbook | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| f. Critique/evaluate their own or other students' class work or homework | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| g. Consider a real-world problem relevant to the course and develop a plan to address it | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |
| h. Use technical passages (from news or science journals) to investigate current issues or new developments in science or technology | <input type="checkbox"/> ¹ | <input type="checkbox"/> ² | <input type="checkbox"/> ³ | <input type="checkbox"/> ⁴ | <input type="checkbox"/> ⁵ | <input type="checkbox"/> ⁶ |

- | | | | | | | |
|-------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| i. Listen to guest speakers | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| j. Go on field trips relevant to the curriculum | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| k. Investigate possible career opportunities in mathematics, science, or technology | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| l. Design and implement their own scientific investigation | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |
| m. Use "state-of-the-art" equipment or technologies | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 |

3. **Please indicate how confident you feel about the following aspects of your teaching.** (Mark one response on each line.)

	Not at all	Slightly confide nt	Moderately confide nt	Very confide nt
a. Your knowledge about the application of the subject to everyday life	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
b. Your ability to advise students about job opportunities in the subject area	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
c. Your ability to prepare students for high school-level study in the subject area	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
d. Your ability to use inquiry-based instructional strategies	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
e. Your ability to mentor beginning teachers	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
f. Your ability to incorporate technology (computers, the Internet, laser discs, etc.) into your teaching	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
g. Your ability to supervise the research projects of your students	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
h. Your ability to prepare students for college-level science courses	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴

4. **During a typical week, approximately how much time did you spend outside of regular school hours on planning and preparing for teaching your courses during the 2008-09 school year?**

Number of hours: _____

5. **To what extent did you make use of each of the following types of assessments to determine student progress and achievement during the 2008-09 school year? (Mark one response on each line.)**

	Never	1-2 times a year	1-2 times a month	1-2 times a week	Almost every class	Every class
a. Pre-tests before beginning a new unit	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
b. Short-answer tests (e.g., multiple choice, true/false, fill-in-the-blank)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
c. Tests requiring open-ended responses (e.g., descriptions, justifications, explanations)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
d. Student portfolios	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
e. Class participation/group discussion	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
f. Student presentations/projects	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
g. Hands-on performance measurements	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶
h. Written explanations of thought processes (e.g., journals, essays)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵	<input type="checkbox"/> ⁶

The following two questions ask about the Metrology and Chromatography components. Responses to these items will help NIST assess improvements that might be made to lessons offered through the Summer Institute. Please take the time to answer these questions thoroughly and include as many details and examples as are necessary.

6. **Three students measure a table with a meter stick and come up with three different numbers. They claim only one of their answers can be correct. How would you respond to their assertion?**
- *Please make sure your answer is framed in a context that (1) is meaningful to middle school students and (2) incorporates any definitions, concepts, and classroom/real-world applications you learned at the NIST Summer Institute.*

Text Box

7. **Some middle school students are having difficulty conceptually understanding how different molecules of an ink sample behave differently during the mobile phase of paper chromatography. You realize that an analogy might help these students understand what is going on. What analogy would you employ for these students and why?**
- *Please make sure your answer is framed in a context that is (1) meaningful to middle school students and (2) incorporates any definitions, concepts, and classroom/real-world applications you learned at the NIST Summer Institute.*

Text Box

8. **To what extent did you make use of the following components of the NIST Summer Institute program with your students during the 2008-09 school year?** (Mark one response on each line.)

	Not at all	Slight extent	Moderat e extent	Great extent	I do not recall this compon ent
a. Measurement uncertainty: How big is Pi?.....	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
b. Metrics "Jeopardy"	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
c. Weights and measures activities	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
d. Experimental design with Jim Filliben	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
e. Cement activity	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
f. Building an Atomic Clock (the Analema)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
g. Ink identification with thin layer chromatography (TLC)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
h. Thermometry activities: Ice melting point, Steam point, CO ₂ sublimation point	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
i. Forensic Science: Blood and Fingerprints	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
j. Gel electrophoresis	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
k. Crystal experiment from NCNR	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
l. Solar system scale model	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
m. Separations using solid phase extraction	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
n. Building a spectrometer	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
o. LabQuest and probes	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
p. Types of Magnetism by Bob Shell	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
q. Designing Bridges to Resist Earthquakes	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵
r. Soda Can Science: Pressure in a Pop Can	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴	<input type="checkbox"/> ⁵

s. Extreme Weather / Weather Jeopardy

12345

t. CSI: Titanic

12345

9. **How useful were each of the following components of the NIST Summer Institute program to your own teaching practices and goals?**
(Mark one response on each line.)

	Not at all useful	Slightly useful	Moderate ly useful	Very useful
a. Measurement uncertainty: How big is Pi?.....	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
b. Metrics “Jeopardy”	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
c. Weights and measures activities	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
d. Experimental design with Jim Filliben	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
e. Cement activity	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
f. Building an Atomic Clock with Bob Vocke	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
g. Ink identification with thin layer chromatography (TLC)	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
h. Thermometry activities: Ice melting point, Steam point, CO ₂ sublimation point	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
i. Forensic Science: Blood and Fingerprints	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
j. Gel electrophoresis	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
k. Crystal experiment from NCNR	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
l. Solar system scale model	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
m. Separations using solid phase extraction	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
n. Building a spectrometer	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
o. LabQuest and probes	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
p. Types of Magnetism by Bob Shell	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
q. Designing Bridges to Resist Earthquakes	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
r. Soda Can Science: Pressure in a Pop Can	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
s. Extreme Weather / Weather Jeopardy	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴

t. CSI: Titanic

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10. **To what extent did you make use of the following LabQuest probes with your students during the 2008-09 school year?** (Mark one response on each line.)

	Not at all	Slight extent	Moderate extent	Great extent
a. Motion detector	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
b. pH sensor	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
c. Voltage probe	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
d. Temperature probes	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
e. Light sensor	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
f. Dual-range force sensor	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
g. Gas pressure sensor	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
h. Hand-grip heart rate monitor	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
i. Conductivity probe	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
j. Magnetic field sensor	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴

11. **How has having the LabQuest and probes changed the way you do activities and hand-on investigations with your students?**

Text Box

12. **What steps might NIST take to better integrate LabQuest into the Summer Institute?**

Text Box

13. To what extent do you feel that you experienced each of the following types of learning as a result of your participation in the NIST Summer Institute program? (Mark one response on each line.)

	Not at all	Slight extent	Moderate extent	Great extent
a. I gained greater understanding of the applications of science and technology in everyday life	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
b. I acquired greater understanding of fundamental concepts in science	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
c. I became familiar with new materials and equipment that I can use in my teaching	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
d. I learned about innovative ways to use standard materials and equipment in my teaching	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
e. I increased my knowledge of current issues in scientific research	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
f. I gained a greater appreciation of the difficulties some students encounter when learning science	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
g. I better understand how collaborative inquiry can be done successfully	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
h. I increased my knowledge of careers that utilize science	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴

14. To what extent was your NIST experience successful in each of the following ways? (Mark one response on each line.)

	Not at all	Slight extent	Moderate extent	Great extent
a. It was responsive to my professional development needs	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
b. It was appropriate to my knowledge, skills, and interests	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴
c. It provided opportunities to engage in inquiry/research activities that I have been able to adapt for classroom use	<input type="checkbox"/> ¹	<input type="checkbox"/> ²	<input type="checkbox"/> ³	<input type="checkbox"/> ⁴

d. The activities were enjoyable and intellectually stimulating to me

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15. To what extent do you agree or disagree with each of the following statements concerning the impact of the NIST Summer Institute program on you professionally? (Mark one response on each line.)

	Stron gly disag ree	Disag ree	Not sure	Agree	Stron gly agree
a. It increased my confidence as a teacher	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
b. It elevated my enthusiasm for science	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
c. It increased my interest in research and the ways science and technology can be applied	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
d. It stimulated me to think about ways I can improve my teaching	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
e. It increased my effectiveness as a teacher	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
f. It increased my interest and ability to network with teachers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
g. It increased my interest and ability to network with scientists	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
h. It increased my motivation to seek out other experiential professional development activities	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
i. It increased my commitment to learning and seeking new ideas and activities for my classroom	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
j. It increased my capacity to provide engaging activities for my students	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

16. Are there any particular aspects of the NIST experience that you feel should have been handled differently or could be improved?

Text Box

17. How would you describe the engagement of your students in the NIST-based activities/materials you used in your classroom?

Text Box

18. Have you shared the ideas, activities or materials from the NIST Summer Institute program with other teachers at your school?

Yes..... ¹ (Answer Q18a)
No..... ² (Answer Q18b)

18a. If yes, what types of ideas, activities and materials—and what were the other teachers' experiences?

Text Box

18b. If not, why haven't you shared the ideas, activities or materials from the NIST Summer Institute program with other teachers at your school?

Text Box

19. Have you maintained contact with any of the scientists you shadowed or met through NIST?

Yes..... ¹ (Answer Q19a)
No..... ² (Answer Q19b)

19a. If so, what type of interactions do you have with them? (Please check all that apply)

- Discuss subject matter
- Discuss current research
- Ask for assistance with resources
- Arrange field trips, demonstrations, or guest speakers for middle school students
- Share pedagogical strategies
- Other (please specify)

Text Box

19b. If not, why haven't you maintained contact with any of the scientists you shadowed or met through NIST?

Text Box

20. What was the most valuable thing you took away from the NIST Summer Institute program?

Text Box

21. How would you rate the NIST Summer Institute program in light of other professional development programs you have experienced?

- | | | |
|----------------|--------------------------|---|
| Poor..... | <input type="checkbox"/> | 1 |
| Fair..... | <input type="checkbox"/> | 2 |
| Good..... | <input type="checkbox"/> | 3 |
| Very good..... | <input type="checkbox"/> | 4 |
| Excellent..... | <input type="checkbox"/> | 5 |

22. Would you recommend the NIST Summer Institute program to your teacher colleagues?

- | | | |
|-----------------|--------------------------|---|
| No..... | <input type="checkbox"/> | 1 |
| Not sure..... | <input type="checkbox"/> | 2 |
| Probably..... | <input type="checkbox"/> | 3 |
| Definitely..... | <input type="checkbox"/> | 4 |

Thank you!