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.

The survey should take 20 minutes to complete.

If you have any questions, please contact **Kara Arnold** at NIST. She can be reached by phone at (301) 975­2471 or by email at [kara.arnold@nist.gov.](mailto:Melissabryce@westat.com)

OMB Control No. 0693­0033

Expiration Date: 06/30/2019

NOTE: This collection of information contains Paperwork Reduction Act (PRA) requirements approved by the Office of Management and Budget (OMB). Notwithstanding any other provisions of the law, no person is required to respond to, nor shall any person be subject to a 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. Public reporting burden for this collection is estimated to be 20 minutes per response, including 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 burden estimate or any aspect of this collection of information, including suggestions for reducing this burden, to the National Institute of Standards and Technology, Attn: Kara Arnold, [kara.arnold@nist.gov](mailto:szeisler@nist.gov), 301-975-2471.

NIST Summer Institute: Post-survey for Non-participants

**Teacher Consent Form**

As part of the evaluation of the NIST Summer Institute, NIST 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.**

fec

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.

|  |  |  |
| --- | --- | --- |
| NIST Summer Institute: Post-survey for Non-participants |  | |
| --------------------------------- | | |
|  | | |
| 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: | |  |

NIST Summer Institute: Post-survey for Non-participants

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

mlj

6th grade

mlj

7th grade

mlj

8th grade

**4. If you taught science to more than one grade during the current school year, select all**

**additional grades that apply.**

fec

6th grade

fec

7th grade

fec

8th grade

fec

I did not teach science to any additional grades

NIST Summer Institute: Post-survey for Non-participants

**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 | nmlkj | nmlkj |
| b. Earth Science | mlj | mlj |
| c. Space Science | nmlkj | nmlkj |
| d. Physics | mlj | mlj |
| e. Chemistry | nmlkj | nmlkj |
| f. Weather | mlj | mlj |
| g. Metrology**\*** | nmlkj | nmlkj |
|  |  |  |
|  |  |  |

**\*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.

NIST Summer Institute: Post-survey for Non-participants

**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 | nmlkj | nmlkj | nmlkj | nmlkj |
| b. Earth Science | mlj | mlj | mlj | mlj |
| c. Space Science | nmlkj | nmlkj | nmlkj | nmlkj |
| d. Physics | mlj | mlj | mlj | mlj |
| e. Chemistry | nmlkj | nmlkj | nmlkj | nmlkj |
| f. Weather | mlj | mlj | mlj | mlj |
| g. Metrology**\*** | nmlkj | nmlkj | nmlkj | nmlkj |
|  |  |  |  |  |
|  |  |  |  |  |

**\*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.

NIST Summer Institute: Post-survey for Non-participants

**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 nmlkj nmlkj nmlkj nmlkj b. Using real­world examples to motivate student interest in science mlj mlj mlj mlj c. Connecting new science concepts to previous science concepts nmlkj nmlkj nmlkj nmlkj d. Creating analogies for scientific concepts mlj mlj mlj mlj e. Addressing students’ misconceptions nmlkj nmlkj nmlkj nmlkj

f. Having students collect data mlj mlj mlj mlj

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

nmlkj nmlkj nmlkj nmlkj

mlj mlj mlj mlj

i. Asking students to explain their conclusions and/or reasoning nmlkj nmlkj nmlkj nmlkj j. Increasing student interest in science careers mlj mlj mlj mlj k. Increasing student interest in the role of science in everyday life nmlkj nmlkj nmlkj nmlkj

NIST Summer Institute: Post-survey for Non-participants

**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 nmlkj nmlkj nmlkj nmlkj b. Using real­world examples to motivate student interest in science mlj mlj mlj mlj c. Connecting new science concepts to previous science concepts nmlkj nmlkj nmlkj nmlkj d. Creating analogies for scientific concepts mlj mlj mlj mlj e. Addressing students’ misconceptions nmlkj nmlkj nmlkj nmlkj

f. Having students collect data mlj mlj mlj mlj

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

nmlkj nmlkj nmlkj nmlkj

mlj mlj mlj mlj

i. Asking students to explain their conclusions and/or reasoning nmlkj nmlkj nmlkj nmlkj j. Increasing student interest in science careers mlj mlj mlj mlj k. Increasing student interest in the role of science in everyday life nmlkj nmlkj nmlkj nmlkj

NIST Summer Institute: Post-survey for Non-participants

**9. Approximately how often did you have students 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) | nmlkj | nmlkj | nmlkj | nmlkj |
| b. Consider a real­world problem relevant to the course and develop a plan to address it | mlj | mlj | mlj | mlj |
| c. Use technical passages (from news or science journals) to investigate current issues or new developments in science or technology | nmlkj | nmlkj | nmlkj | nmlkj |
| d. Listen to guest speakers | mlj | mlj | mlj | mlj |
| e. Go on field trips relevant to the curriculum | nmlkj | nmlkj | nmlkj | nmlkj |
| f. Investigate possible career opportunities in mathematics, science, or technology | mlj | mlj | mlj | mlj |
| g. Design and implement their own scientific investigation | nmlkj | nmlkj | nmlkj | nmlkj |
| h. Use “state­of­the­art” equipment or technologies | mlj | mlj | mlj | mlj |

NIST Summer Institute: Post-survey for Non-participants

**10. Consider only science teachers within 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 nmlkj nmlkj nmlkj nmlkj

b. Share a specific science lesson that was very effective for teaching a concept

mlj mlj mlj mlj

c. Share strategies for making science accessible to all students nmlkj nmlkj nmlkj nmlkj

d. Have my classroom observed by other science teachers to demonstrate how to teach a specific science lesson, activity, or concept

e. Demonstrate a specific science lesson, activity, or concept for students in another teacher’s classroom

mlj mlj mlj mlj

nmlkj nmlkj nmlkj nmlkj

**11. Consider only science teachers outside 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 nmlkj nmlkj nmlkj nmlkj

b. Share a specific science lesson that was very effective for teaching a concept

mlj mlj mlj mlj

c. Share strategies for making science accessible to all students nmlkj nmlkj nmlkj nmlkj

d. Have my classroom observed by other science teachers to demonstrate how to teach a specific science lesson, activity, or concept

e. Demonstrate a specific science lesson, activity, or concept for students in another teacher’s classroom

mlj mlj mlj mlj nmlkj nmlkj nmlkj nmlkj

NIST Summer Institute: Post-survey for Non-participants

**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 nmlkj nmlkj nmlkj nmlkj

b. A teaching colleague at another middle school mlj mlj mlj mlj

c. A science supervisor from within my school district nmlkj nmlkj nmlkj nmlkj

d. Someone from a professional science teaching organization (e.g., NSTA)

mlj mlj mlj mlj

e. A professional scientist of my acquaintance (e.g., a former professor) nmlkj nmlkj nmlkj nmlkj f. My school district’s science website mlj mlj mlj mlj g. My state’s science website nmlkj nmlkj nmlkj nmlkj h. A targeted Google search mlj mlj mlj mlj i. A federal agency website (e.g., NSF, NASA, NOAA, NIST) nmlkj nmlkj nmlkj nmlkj j. Specific science websites (e.g., Why Files, Exploratorium) mlj mlj mlj mlj k. Other nmlkj nmlkj nmlkj nmlkj

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

**in the space below:**

5

6

NIST Summer Institute: Post-survey for Non-participants

**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 nmlkj nmlkj nmlkj nmlkj b. The quality of my teaching influences my students’ achievement in science mlj mlj mlj mlj c. I continually find better ways to teach science nmlkj nmlkj nmlkj nmlkj

d. I know how to motivate my students to learn science mlj mlj mlj mlj

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.

nmlkj nmlkj nmlkj nmlkj mlj mlj mlj mlj nmlkj nmlkj nmlkj nmlkj mlj mlj mlj mlj

**NIST Summer Institute: Post-survey for Non-participants**

------------------------------------------------------------------------------------------------------

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.