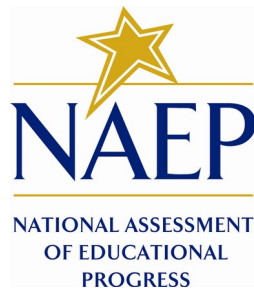


***THE NATIONAL ASSESSMENT OF
EDUCATIONAL PROGRESS***

**Wave 2 Submittal for 2008
VOLUME II**

**Part 5c of 8
BACKGROUND QUESTIONS
FOR 2008 ASSESSMENT**

Teacher Science Grade 8 (Background, Education, Training; Science)



Volume II contains:

- Part 1 of 8 - Student Grade 4: Pilot Science; Reading Braided Study
- Part 2 of 8 - Student Grade 8: Pilot Science; Reading Braided Study
- Part 3 of 8 - Student Grade 12: Pilot Science

- Part 4 of 8 - Teacher Grade 4 (Background, Education, Training; Reading, Mathematics, Science)

- Part 5a of 8 - Teacher Reading Grade 8 (Background, Education, Training; Reading)
- Part 5b of 8 - Teacher Mathematics Grade 8 (Background, Education, Training; Mathematics)
- **Part 5c of 8 - Teacher Science Grade 8 (Background, Education, Training; Science)**

- Part 6 of 8 - School Grade 4 (School Characteristics & Policies; Reading, Mathematics, Science, Charter School)
- Part 7 of 8 - School Grade 8 (School Characteristics & Policies; Reading, Mathematics, Science, Charter School)
- Part 8 of 8 - School Grade 12 (School Characteristics & Policies; Reading, Mathematics, Science, Charter School)

June 29, 2007

TEACHER QUESTIONNAIRES

OMB Information on Teacher Questionnaire Cover Page

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control numbers for this information collection are 1850-0790. The time required to complete this information collection is estimated to average 20 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4651. If you have comments or concerns regarding the status of your individual submission of this form, write directly to: NAEP/NCES, U.S. Department of Education, 1990 K Street N.W., Washington, D.C. 20006-5651.

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This report is authorized by law (P.L.107-110, 20 U.S.C. §9010). While your participation is voluntary, your cooperation is needed to make the results of the survey comprehensive, accurate, and timely. All responses that relate to or describe identifiable characteristics of teachers or schools may be used only for statistical purposes and may not be disclosed, or used, in identifiable form for any other purpose, unless otherwise compelled by law. OMB OMB No. 1850-0790 Approval Expires 05/31/2010
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Teacher Questionnaire Science – Grade 8

Part I: Background, Education, & Training

For several questions on this survey, you are asked to fill in numbers. For these questions, please print the appropriate number in each of the boxes provided. Please print legibly with a No. 2 pencil. Keep all printing within the boxes, and erase any stray marks.

Using one number per box, fill in every box. For example, 95 students would be written as:

0 9 5

1. Are you Hispanic or Latino? Fill in **one or more ovals**. (VB331330) [4/8]
 - A No, I am not Hispanic or Latino.
 - B Yes, I am Mexican, Mexican American, or Chicano.
 - C Yes, I am Puerto Rican or Puerto Rican American.
 - D Yes, I am Cuban or Cuban American.
 - E Yes, I am from some other Hispanic or Latino background.

2. Which of the following best describes you? Fill in **one or more ovals**. (VB331331) [4/8]
 - A White
 - B Black or African American
 - C Asian
 - D American Indian or Alaska Native
 - E Native Hawaiian or other Pacific Islander

Questions 3–4. For the next two questions, include any full-time teaching assignments, part-time teaching assignments, and long-term substitute assignments, but not student teaching.

3. Counting this year, how many years have you worked as an elementary or secondary teacher? If less than 4 months total experience, enter “00.” (VB337243) [8]

Years

4. Counting this year, how many years have you taught science in grades 6 through 12? If less than 4 months total experience, enter “00.” (VB595989) [8]

Years

5. Did you enter teaching through an alternative certification program?

(An alternative program is a program that was designed to expedite the transition of non-teachers to a teaching career, for example, a state, district, or university alternative certification program.) (NEW) [4/8]

A Yes

B No

6. What type of teaching certificate do you hold in the state where you currently teach? (NEW) [4/8]

A Regular or standard state certificate or advanced professional certificate → *Skip to Question 8*

B Certificate issued after satisfying all requirements except the completion of a probationary period → *Go to Question 7*

C Certificate that requires some additional coursework, student teaching or passage of a test before regular certification can be obtained → *Go to Question 7*

D Certificate issued to persons who must complete a certification program in order to continue teaching → *Go to Question 7*

E I do not hold any of the above certificates in the state where I currently teach. → *Go to Question 7*

7. Do you hold a currently valid regular or standard certification from a state other than the one in which you are currently teaching? (VB595188) [4/8]

A Yes

B No

8. This school year, are you a Highly Qualified Teacher (HQT) according to your state's requirements?

(Generally, to be Highly Qualified, teachers must meet requirements related to 1) a bachelor's degree, 2) full state certification, and 3) demonstrate competency in the subject area(s) taught. The HQT requirement is a provision under the No Child Left Behind (NCLB) Act.) (NEW) [4/8]

A Yes

B I meet my state's requirements for a Highly Qualified Teacher in at least one subject that I teach.

C No

9. Are you certified by the National Board for Professional Teaching Standards in at least one content area?

(The National Board for Professional Teaching Standards is a nongovernmental organization that administers National Board certification, a voluntary national assessment program that certifies teachers who meet high professional standards. In order to gain certification, the candidate must at least complete a portfolio of classroom practice and pass one or more tests of content knowledge.) (NEW) [4/8]

A Yes, I am fully certified by the National Board for Professional Teaching Standards.

B I am working towards my National Board certification.

C No

10. What is the highest academic degree you hold? (HE001012) [4/8]

- A High-school diploma
- B Associate’s degree/vocational certification
- C Bachelor’s degree
- D Master’s degree
- E Education specialist’s or professional diploma based on at least one year’s work past master’s degree
- F Doctorate
- G Professional degree (e.g., M.D., LL.B., J.D., D.D.S.)

11. Did you have a major, minor, or special emphasis in any of the following subjects as part of your **undergraduate** coursework? Fill in **one** oval on each line. (VB333658) [8]

	Yes, a major	Yes, a minor or special emphasis	No	[Same at:]	
	A	B	C		
a. Biology or other life science	A	B	C	[8]	(VB595990)
b. Physics, chemistry, or other physical science	A	B	C	[8]	(VB595991)
c. Earth or space science	A	B	C	[8]	(VB595992)
d. Mathematics or mathematics education	A	B	C	[8]	(VB595593)
e. Science education	A	B	C	[8]	(NEW)
f. Engineering or engineering education	A	B	C	[8]	(NEW)
g. Elementary or secondary education	A	B	C	[8]	(VB595189)

12. Did you have a major, minor, or special emphasis in any of the following subjects as part of your **graduate** coursework? Fill in **one** oval on each line. (VB345619) [8]

	Yes, a major	Yes, a minor or special emphasis	No	[Same at:]	
a. Biology or other life science	A	B	C	[8]	(VB595994)
b. Physics, chemistry, or other physical science	A	B	C	[8]	(VB595995)
c. Earth or space science	A	B	C	[8]	(VB595996)
d. Mathematics or mathematics education	A	B	C	[8]	(VB595997)
e. Science education	A	B	C	[8]	(NEW)
f. Engineering or engineering education	A	B	C	[8]	(NEW)
g. Elementary or secondary education	A	B	C	[8]	(VB595190)

13. As part of either your undergraduate or graduate coursework, how many **advanced science** courses (such as physiology, molecular biology, or biochemistry) did you take? (NEW) [4/8]

- A None
- B 1 or 2 courses
- C 3 or 4 courses
- D 5 or more courses

14. As part of either your undergraduate or graduate coursework, how many **science education** courses did you take? (NEW) [4/8]

- A None
- B 1 or 2 courses
- C 3 or 4 courses
- D 5 or more courses

15. During the last **two years**, did you participate in or lead any of the following professional development activities **related to the teaching of science**? Fill in **one** oval on each line. (VB595998) [8]

	Yes, I have participated	Yes, I have led	No	[Same at:]	
a. College course taken after your first certification	A	B	C	[8]	(NEW)
b. Workshop or training session	A	B	C	[8]	(NEW)
c. Conference or professional association meeting	A	B	C	[8]	(NEW)
d. Observational visit to another school	A	B	C	[8]	(NEW)
e. Mentoring and/or peer observation and coaching as part of a formal arrangement	A	B	C	[8]	(NEW)
f. Committee or task force focusing on curriculum, instruction, or student assessment	A	B	C	[8]	(NEW)
g. Regularly scheduled discussion or study group	A	B	C	[8]	(NEW)
h. Teacher collaborative or network (such as one organized by an outside agency or over the Internet)	A	B	C	[8]	(NEW)
i. Individual or collaborative research	A	B	C	[8]	(NEW)
j. Independent reading on a regular basis (for example, educational journals, books, or the Internet)	A	B	C	[8]	(NEW)
k. Co-teaching/team teaching	A	B	C	[8]	(NEW)
l. Consultation with a subject specialist	A	B	C	[8]	(NEW)

16. Consider all of the professional development activities you participated in during the last **two years**. To what extent did you learn about each of the following topics? Fill in **one** oval on each line. (NEW) [4/8]

	Not at all	Small extent	Moderate extent	Large extent	[Same at:]	
a. How students learn science	A	B	C	D	[4/8]	(NEW)
b. Scientific inquiry and/or technological design	A	B	C	D	[4/8]	(NEW)
c. Content standards in science	A	B	C	D	[4/8]	(NEW)
d. Curricular materials available in science (units, texts)	A	B	C	D	[4/8]	(NEW)
e. Instructional methods for teaching science	A	B	C	D	[4/8]	(NEW)
f. Instructional methods for teaching technological design	A	B	C	D	[4/8]	(NEW)
g. Effective use of laboratory activities in science instruction	A	B	C	D	[4/8]	(NEW)
h. Effective use of information and communication technology (ICT) in science instruction	A	B	C	D	[4/8]	(NEW)
i. Methods for assessing students in science	A	B	C	D	[4/8]	(NEW)
j. Preparation of students for district and state assessments	A	B	C	D	[4/8]	(NEW)
k. Strategies for teaching science to students from diverse backgrounds (including English language learners)	A	B	C	D	[4/8]	(NEW)

17. During the last **two years** have you participated in activities associated with school improvement efforts directed at issues such as adequate yearly progress and state accountability standards? (NEW) [4/8]

A Yes

B No

18. Do you have special leadership responsibilities for **science education** at your school (for example, responsibilities as a mentor teacher, lead teacher, resource specialist, departmental chair, or master teacher)? Fill in **one** oval on each line. (VB598091) [8]

A Yes

B No

Teacher Questionnaire Science – Grade 8

Part II: Classroom Organization & Science Instruction

The following questions ask about the organization of your science classroom. If you teach more than one eighth-grade science class, please pick one of these classes to use as a basis for answering the following questions.

1. About how much time in total do you spend with this class on **science instruction** in a typical week? (VB598093) [8]
 - A Less than 1 hour
 - B 1–2.9 hours
 - C 3–4.9 hours
 - D 5–6.9 hours
 - E 7 hours or more

2. To what extent do you emphasize each of the following objectives in this eighth-grade science class? Fill in **one** oval on each line. (NEW) [8]

	Not at all	Small extent	Moderate extent	Large extent	[Same at:]	
a. Increasing students' interest in science	A	B	C	D	[8]	(NEW)
b. Teaching scientific facts and principles	A	B	C	D	[8]	(NEW)
c. Teaching scientific methods	A	B	C	D	[8]	(NEW)
d. Preparing students for further study in science	A	B	C	D	[8]	(NEW)
e. Developing inquiry skills	A	B	C	D	[8]	(NEW)
f. Developing problem-solving (design) skills	A	B	C	D	[8]	(NEW)
g. Developing skills in lab techniques	A	B	C	D	[8]	(NEW)
h. Increasing awareness of the importance of science in daily life	A	B	C	D	[8]	(NEW)
i. Developing systematic observation skills	A	B	C	D	[8]	(NEW)
j. Learning about applications of science to environmental issues	A	B	C	D	[8]	(NEW)
k. Developing scientific writing skills	A	B	C	D	[8]	(NEW)

3. In this eighth-grade science class, how much time do you spend on each of the following areas? Fill in **one** oval on each line. (NEW) [8]

	None	Little	Some	A lot	[Same at:]	
a. Life science	A	B	C	D	[8]	(NEW)
b. Earth and space science	A	B	C	D	[8]	(NEW)
c. Physical science	A	B	C	D	[8]	(NEW)
d. Engineering and	A	B	C	D	[8]	(NEW)

technology

4. In this eighth-grade science class, how often do your students do each of the following? Fill in **one** oval on each line. (NEW) [8]

	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every science class	[Same at:]	
a. Read a science textbook	A	B	C	D	[8]	(NEW)
b. Read a book or magazine about science or technology	A	B	C	D	[8]	(NEW)
c. Watch a movie, video or DVD about science	A	B	C	D	[8]	(NEW)
d. Watch you do a science project or activity	A	B	C	D	[8]	(NEW)
e. Take a science test or quiz	A	B	C	D	[8]	(NEW)

5. In this eighth-grade science class, how often do your students do each of the following? Fill in **one** oval on each line. (NEW) [8]

	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every science class	[Same at:]	
a. Identify questions that can be addressed through scientific investigations	A	B	C	D	[8]	(NEW)
b. Discuss the kinds of problems that engineers can solve	A	B	C	D	[8]	(NEW)
c. Work with other students on a science project or activity	A	B	C	D	[8]	(NEW)
d. Make graphs or charts of the results from your science project or activity	A	B	C	D	[8]	(NEW)
e. Talk about measurements they took during a science project or activity	A	B	C	D	[8]	(NEW)
f. Talk about the results of their science project or activity	A	B	C	D	[8]	(NEW)
g. Figure out different ways to solve a science problem	A	B	C	D	[8]	(NEW)
h. Present what they have learned in science class	A	B	C	D	[8]	(NEW)

6. Do you use an online textbook for eighth-grade science instruction? (NEW) [8]
- A Yes, it is our primary instructional resource.
 - B Yes, we use it to supplement other instructional resources.
 - C No
7. In this eighth-grade science class, do your students have access to computers or other technological resources? (NEW) [8]
- A Yes → *Go to Question 8*
 - B No → *Skip to Question 10*

8. In this eighth-grade science class, which of the following technological resources do you use for science instruction? Fill in **one** oval on each line. ^(NEW) [8]

	Yes	No	[Same at:]	
a. Desktop computer	A	B	[8]	(NEW)
b. Laptop computer	A	B	[8]	(NEW)
c. Tablet PC (notebook-like computer that allows users to write or draw through the use of a stylus or touch-screen)	A	B	[8]	(NEW)
d. Digital projector (device that connects to a computer to display presentations, demonstrate lessons, such as an LCD)	A	B	[8]	(NEW)
e. CD-ROM software	A	B	[8]	(NEW)
f. Online software	A	B	[8]	(NEW)
g. Digital music device (pocket-sized music player used to listen to or create audio files, such as an MP3 player)	A	B	[8]	(NEW)
h. Cable/satellite/closed-circuit television	A	B	[8]	(NEW)
i. DVD player and DVDs	A	B	[8]	(NEW)
j. Digital camera	A	B	[8]	(NEW)
k. Graphing calculator	A	B	[8]	(NEW)
l. Handheld device (pocket-sized computing device, such as personal digital assistant or smartphone)	A	B	[8]	(NEW)
m. Data collection sensors/probes (tool that connects to a handheld device or graphing calculator and detects motion, pH, temperature, light)	A	B	[8]	(NEW)
n. Online course management system (web-based software used to organize information, assignments, grades, and discussions)	A	B	[8]	(NEW)
o. Digital whiteboard (computerized display panels that can respond to fingertip command and creates a shared interactive space, akin to traditional chalkboards)	A	B	[8]	(NEW)

9. In this eighth-grade science class, how often do your students use a **computer or other technological resources** to do each of the following? Fill in **one** oval on each line. (NEW) [8]

	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every scienc e class	[Same at:]	
a. Conduct a search on a topic they are studying in class	A	B	C	D	[8]	(NEW)
b. Simulate a physical or biological process or see how something works (for example, how planets orbit the sun, how gas expands)	A	B	C	D	[8]	(NEW)
c. Make a chart or graph that summarizes scientific data	A	B	C	D	[8]	(NEW)
d. Conduct statistical analyses of scientific data	A	B	C	D	[8]	(NEW)

10. How well does your school system provide you with the following instructional materials and other resources you need to teach this eighth-grade science class? Fill in **one** oval on each line. (NEW) [8]

	I do not have this resource.	I have some of the resources I need.	I have most of the resources I need.	I have all of the resources I need.	[Same as:]	
a. Science textbooks	A	B	C	D	[8]	(NEW)
b. Science magazines and books	A	B	C	D	[8]	(NEW)
c. Supplies for demonstrations	A	B	C	D	[8]	(NEW)
d. Supplies for science labs	A	B	C	D	[8]	(NEW)
e. Space to conduct science labs	A	B	C	D	[8]	(NEW)
f. Computers for students' use in class	A	B	C	D	[8]	(NEW)
g. Computer labs	A	B	C	D	[8]	(NEW)
h. Computers for teachers' use	A	B	C	D	[8]	(NEW)
i. Computerized science labs for classroom use	A	B	C	D	[8]	(NEW)
j. Audiovisual materials	A	B	C	D	[8]	(NEW)
k. Science kits	A	B	C	D	[8]	(NEW)

11. Are students assigned to this class by ability? (HE002412) [4/8]

- A Yes
- B No

12. Think about your **least advanced** science students. Do these students receive science instruction that differs in any of the following ways from the instruction provided to your **average** science students? Fill in **one** oval on each line. (NEW) [8]

	Yes	No	[Same at:]	
a. I set different achievement standards for these students.	A	B	[8]	(NEW)
b. I supplement the regular course curriculum with additional material for these students.	A	B	[8]	(NEW)
c. I have these students engage in different classroom activities.	A	B	[8]	(NEW)
d. I use a different set of methods in teaching these students.	A	B	[8]	(NEW)
e. I pace my teaching differently for these students.	A	B	[8]	(NEW)

13. Think about your **most advanced** science students. Do these students receive science instruction that differs in any of the following ways from the instruction provided to your **average** science students? Fill in **one** oval on each line. (NEW) [8]

	Yes	No	[Same at:]	
a. I set different achievement standards for these students.	A	B	[8]	(NEW)
b. I supplement the regular course curriculum with additional material for these students.	A	B	[8]	(NEW)
c. I have these students engage in different classroom activities.	A	B	[8]	(NEW)
d. I use a different set of methods in teaching these students.	A	B	[8]	(NEW)
e. I pace my teaching differently for these students.	A	B	[8]	(NEW)

14. Do you meet with students from this eighth-grade science class one-on-one to review their work and evaluate their progress? (NEW) [8]

A Yes → Go to Question 15

B No → **You have finished the survey. Thank you for your time.**

15. When you meet with students one-on-one to review their work and evaluate their progress in science, which of the following activities do you do? Fill in **one** oval on each line. (NEW) [8]

	Yes	No	[Same at:]	
a. Discuss the student's current level of performance	A	B	[8]	(NEW)
b. Set goals for specific progress the student would like to make	A	B	[8]	(NEW)
c. Discuss progress the student has made towards goals previously set	A	B	[8]	(NEW)
d. Determine how to adjust your teaching strategies to meet the student's current learning needs and to reflect the student's future goals	A	B	[8]	(NEW)