

Identification Label

School ID :
Stratum ID:
Teacher ID: **Link:**
Name:
Class ID:
Name of Class:
Subject: **Grade:**

Science Teacher Questionnaire Main Survey

Your school has agreed to participate in the Third International Mathematics and Science Study - Repeat (TIMSS-R), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS-R is investigating mathematics and science achievement in about forty countries around the world. It is designed to measure and interpret differences in national education systems in order to help improve the teaching and learning of mathematics and science worldwide.

This questionnaire is addressed to teachers of science, who are asked to supply information about their academic and professional backgrounds, instructional practices, and attitudes towards teaching science. Since your class has been selected as part of a nationwide sample, your responses are very important in helping to describe science classes in <country>.

Some of the questions in this questionnaire ask about **your science class**. This is the class which is identified at the top of this page, and which will be tested as part of TIMSS-R in your school.

It is important that you answer each question carefully so that the information provided reflects your situation as accurately as possible. It is estimated that it will require approximately 60 minutes to complete this questionnaire.

Your cooperation in completing this questionnaire is greatly appreciated.

TIMSS Study Center
Boston College
Chestnut Hill, MA 02467
USA

(Institute Address)

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GENERAL DIRECTIONS:

1. Identify a place and a time when you will be able to complete this questionnaire without being interrupted. This questionnaire has been designed to be completed within 60 minutes by most teachers. However, the amount of time you will need may vary. To make it as easy as possible for you to respond, most items may be completed simply by checking the appropriate box.
2. There are no “right” or “wrong” answers to any of these items. The questionnaire is designed to provide information about teachers’ professional experiences, opinions, and classroom activities. **Remember, “your science class” is the class which is identified on the cover of this questionnaire, and which will be tested as part of TIMSS-R in your school.**
3. More specific instructions to assist you in responding are found in *italics* for each item.

THERE ARE NO QUESTIONS ON THIS PAGE

Section A

1. How old are you?

Check one box only.

- under 25
- 25-29
- 30-39
- 40-49
- 50-59
- 60 or ~~more~~ *only*.....

4. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> in one school week altogether?

Write in number _____ *<hours/periods>*

5. In one typical calendar week from Monday to Sunday, for how many single <hours/periods> are you formally <scheduled/time-tabled> to teach each of the following subjects?

NRC Note: <List only the generic science courses appropriate for your country.>

Count a double <hour/period> as two single <hours/periods>.

Write zero if none.

Number of

- 7. APPROXIMATELY how many hours per week do you normally spend on each of the following activities outside the formal school day? Do not include time already accounted for in Question # 6.**

Check one box in each row.

	<i>None</i>	<i>Less than 1 hour</i>	<i>1 - 2 hours</i>	<i>3 - 4 hours</i>	<i>More than 4 hours</i>
a) preparing or grading student tests or exams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) reading and grading other student work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) planning lessons by yourself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) meeting with students outside of classroom time (e.g., tutoring, guidance)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) meeting with parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) professional reading and development activity (e.g., seminars, conferences, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) keeping students' records up to date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) administrative tasks including staff meetings (e.g. photocopying, displaying students' work)..	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- 8. APPROXIMATELY how many hours per week do you normally spend on your teaching activities altogether (include time spent in and out of school)?**

Please round to the nearest whole hour. _____

12. To what extent do you agree or disagree with each of the following statements?

Check one box in each row.

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Agree</i>	<i>Strongly agree</i>
a) Science is primarily an abstract subject.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Science is primarily a formal way of representing the real world.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Science is primarily a practical and structured guide for addressing real situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Some students have a natural talent for science and others do not.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) It is important for teachers to give students prescriptive and sequential directions for doing science experiments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Focusing on rules is a bad idea. It gives students the impression that the sciences (physics, chemistry, biology, and earth science) are a set of procedures to be memorized.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) If students get into debates in class about ideas or procedures covering the sciences, it can harm their learning.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Students see a science task as the same task when it is represented in two different ways (picture, concrete material, symbol set, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) A liking for and understanding of students are essential for teaching science.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. How well prepared do you feel you are to teach...

*Check **one** box in each row.*

<i>I do not teach these</i>	<i>Not well</i>	<i>Somewhat</i>	<i>Very well</i>
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15. What is the highest level of formal education you have completed?*Check one box only.*

- <DID NOT COMPLETE SECONDARY SCHOOL>
- <SECONDARY ONLY>
- <BA OR EQUIVALENT>
- <MA/PHD>

16a. Do you have a <teacher training certificate>?*Check one box only.* Yes No **16b. How many years of <pre-service teacher training> have you had?**

Please round to the nearest whole number. _____

(Write in 0 (zero), if you have not had any teacher training.)

16c. If you have had <pre-service teacher training>, did you begin this training in secondary school?*Check one box only.* Yes No

17. While studying to obtain your <BA or equivalent or teacher training certificate>, what was your major or main area of study?

I do not have a <BA or equivalent or teacher training certificate.>
 (Check the box and skip to the next question.)

Check **one** box in each row.

	<i>Yes</i>	<i>No</i>
a) Mathematics	<input type="checkbox"/>	<input type="checkbox"/>
b) Biology	<input type="checkbox"/>	<input type="checkbox"/>
c) Physics	<input type="checkbox"/>	<input type="checkbox"/>
d) Chemistry	<input type="checkbox"/>	<input type="checkbox"/>
e) Education	<input type="checkbox"/>	<input type="checkbox"/>
f) Mathematics Education	<input type="checkbox"/>	<input type="checkbox"/>
g) Science Education	<input type="checkbox"/>	<input type="checkbox"/>
h) Other	<input type="checkbox"/>	<input type="checkbox"/>

18. If you have a master's degree, what was your major or main area of study?

I do not have a master's degree.
 (Check the box and skip to the next question.)

Check **one** box in each row.

	<i>Yes</i>	<i>No</i>
a) Mathematics	<input type="checkbox"/>	<input type="checkbox"/>
b) Biology	<input type="checkbox"/>	<input type="checkbox"/>
c) Physics	<input type="checkbox"/>	<input type="checkbox"/>
d) Chemistry	<input type="checkbox"/>	<input type="checkbox"/>
e) Education	<input type="checkbox"/>	<input type="checkbox"/>
f) Mathematics Education	<input type="checkbox"/>	<input type="checkbox"/>
g) Science Education	<input type="checkbox"/>	<input type="checkbox"/>
h) Other	<input type="checkbox"/>	<input type="checkbox"/>

International Option

19. Was teaching your first choice as a career when beginning university or teacher education college?

Check only one box..... Yes No

20. Would you change to another career if you had the opportunity?

Check only one box..... Yes No

21. Do you think that society appreciates your work?

Check only one box..... Yes No

22. Do you think your students appreciate your work?

Check only one box..... Yes No

23. Approximately how many books are in your home?

(Do not count magazines or newspapers.)

Check one box only.

none or very few (0-10)

enough to fill a shelf (11-25)

enough to fill a bookcase (26-100)

enough to fill two bookcases (101-200)

enough to fill three or more bookcases (more than 200)

THERE ARE NO QUESTIONS ON THIS PAGE

Section B



1. How many students are in your science class?

Write in a number for each. Write 0 (zero) if there are none.

boys _____ girls _____

2. What subject matter do you emphasize most in your science class?

Check one box only.

- General/integrated science
 - Earth science
 - Biology
 - Chemistry
 - Physics
 - Physical science (chemistry/physics)
 - Other, please specify _____
-

3. How many minutes per week do you teach science to your science class?

Minutes: _____

4a. Do you use a textbook in teaching science to your class?

Check one box.

Yes No

4b. If yes, approximately what percentage of your weekly science teaching time is based on your science textbook?

Check one box.

- 0-25%
 - 26-50%
 - 51-75%
 - 76-100%
-

5. Do the students in your science class have calculators available to use during science lessons?

Check one box only.

Yes No

6. To what extent are the students in your science class permitted to use calculators in science lessons?

Check one box only.

- unrestricted use
- restricted use
- calculators are not permitted

7. How often do students in your science class use calculators for the following activities?

Check one box in each row.

	<i>Almost every class</i>	<i>Once or twice a week</i>	<i>Once or twice a month</i>	<i>Never, or hardly ever</i>
a) Checking answers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Tests and exams	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Routine computation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Solving complex problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Exploring number concepts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

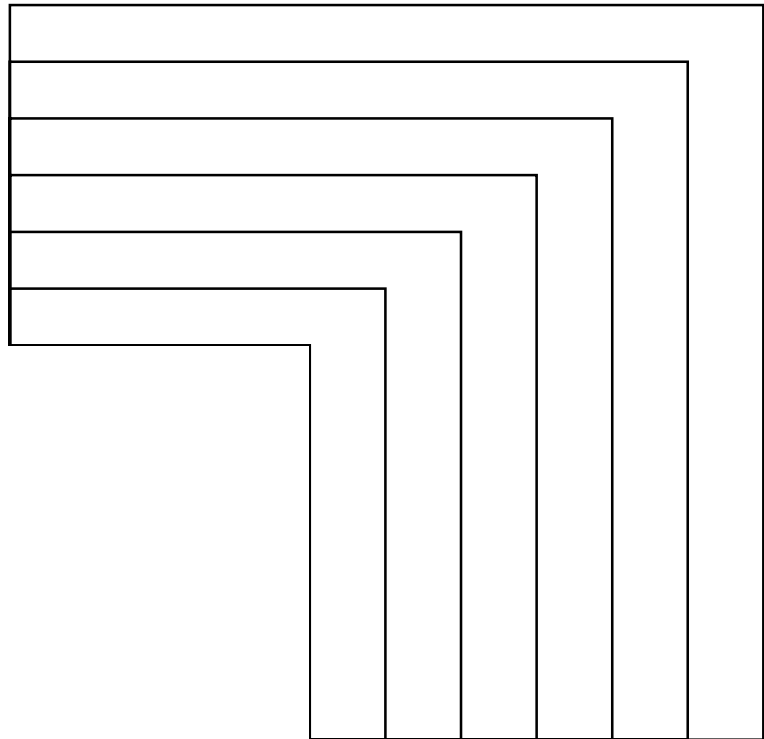
8. Do the students in your science class have computers available to use during science lessons?

Check one box in each row.

	<i>Never or almost never</i>	<i>Some lessons</i>	<i>Most lessons</i>	<i>Every lesson</i>
a) in the classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) in other instructional rooms (computer labs, science lab, reading lab, library, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If computers are available,

	<i>Yes</i>	<i>No</i>
c) do any of the computers have access to the Internet?	<input type="checkbox"/>	<input type="checkbox"/>
d) do you use the Internet for instructional/educational purposes?	<input type="checkbox"/>	<input type="checkbox"/>



10. In your science lessons, how often do you usually ask students to do the following?

*Check **one** box in each row.*

	<i>Never or almost never</i>	<i>Some lessons</i>	<i>Most lessons</i>	<i>Every lesson</i>
a) explain the reasoning behind an idea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) represent and analyze relationships using tables, charts, or graphs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) work on problems for which there is no immediately obvious method of solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) use computers to solve exercises or problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) write explanations about what was observed and why it happened	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) put events or objects in order and give a reason for the organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) use graphing calculators to solve exercises or problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. In science lessons, how often do students...

Check one box in each row.

	<i>Never or almost never</i>	<i>Some lessons</i>	<i>Most lessons</i>	<i>Every lesson</i>
a) work individually without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) work individually with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) work together as a class with the teacher teaching the whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) work together as a class with students responding to one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) work in pairs or small groups without assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) work in pairs or small groups with assistance from the teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. In a typical month of lessons in your science class, what percentage of time is spent on each of the following activities?

Write in a percentage for each activity.

The total should add to 100%.

a) administrative tasks (not related to lesson's content/purpose).....	_____ %
b) homework review	_____ %
c) lecture-style presentation by teacher	_____ %
d) teacher-guided student practice	_____ %
e) re-teaching and clarification of content/procedures	_____ %
f) student independent practice	_____ %
g) tests and quizzes	_____ %
h) teacher demonstrations of experiments	_____ %
i) students conducting experiments	_____ %
j) other	_____ %

13. The following list includes the main topics addressed by the TIMSS science test. Check the response that describes when students in your class have been taught each topic.

*If a topic has been taught before this year and also in the current year, check the two boxes that apply. Otherwise, check **one** box in each row.*

	<i>Taught before this year</i>	<i>Taught 1-5 periods this year</i>	<i>Taught more than 5 periods this year</i>	<i>Not yet taught</i>	<i>I do not know</i>
a) Earth Science					
1) Earth’s physical features (layers, landforms, bodies of water, rocks, soil)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Earth’s atmosphere (layers, composition, temperature, pressure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Earth processes and history (weather and climate, physical cycles, plate tectonics, fossils)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Earth in the solar system and the universe (interactions between Earth, sun, and moon; relationship to planets and stars)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Biology					
5) Human body - structure and function of organs and systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Human bodily processes (metabolism, respiration, digestion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Human nutrition, health, and disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8) Biology of plant and animal life (diversity, structure, life processes, life cycles)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Interactions of living things (biomes and ecosystems, interdependence)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Reproduction, genetics, evolution, and speciation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Chemistry					
11) Classification of matter (elements, compounds, solutions, mixtures)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12) Structure of matter (atoms, ions, molecules, crystals)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Chemical reactivity and transformations (definition of chemical change, oxidation, combustion)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14) Energy and chemical change (exothermic and endothermic reactions, reaction rates)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

d) Physics

- | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 15) Physical properties and physical changes of matter (weight, mass, states of matter, boiling, freezing)..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16) Subatomic particles (protons, electrons, neutrons) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17) Energy types, sources, and conversions (chemical, kinetic, electric, light energy; work and efficiency) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18) Heat and temperature | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19) Wave phenomena, sound, and vibration | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 20) Light | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 21) Electricity and magnetism..... | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 22) Forces and motion (types of forces, balanced/unbalanced forces, fluid behavior, speed, acceleration) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

e) Environmental and Resource Issues

- 23) Pollution (acid rain, global warming,

14. In your view to what extent do the following limit how you teach your science class?

Check one box in each row.

	<i>Not at all</i>	<i>A little</i>	<i>Quite a lot</i>	<i>A great deal</i>
a) students with different academic abilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) students who come from a wide range of backgrounds, (e.g., economic, language)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) students with special needs, (e.g., hearing, vision, speech impairment, physical disabilities, mental or emotional/psychological impairment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) uninterested students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) disruptive students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) parents interested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) parents uninterested in their children's learning and progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) shortage of computer hardware	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) shortage of computer software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) shortage of other instructional equipment for students' use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k) shortage of equipment for your use in demonstrations and other exercises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l) inadequate physical facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m) high student/teacher ratio	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n) low morale among fellow teachers/administrators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o) low morale among students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p) threat(s) to personal safety or the safety of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. How often do you usually assign science homework?*Check one box.*

- never
- less than once a week
- once or twice a week
- 3 or 4 times a week
- every day

16. If you assign science homework, how many minutes of science homework do you usually assign your students?*(Consider the time it would take an average student in your class.)**Check one box.*

- less than 15 minutes
- 15-30 minutes
- 31-60 minutes
- 61-90 minutes
- more than 90 minutes

If you assign science homework, how often do you assign each of the?

18. If students are assigned written science homework, how often do you do the following?

I do not assign written homework.
 (Check the box and skip to the next question.)

Check **one** box in each row.

	<i>Never</i>	<i>Rarely</i>	<i>Sometimes</i>	<i>Always</i>
a) record whether or not the homework was completed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) collect, correct and keep assignments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) collect, correct assignments and then return to students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) give feedback on homework to whole class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) have students correct their own assignments in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) have students exchange assignments and correct them in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) use it as a basis for class discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) use it to contribute towards students' grades or marks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. In assessing the work of the students in your science class, how much weight do you give each of the following types of assessment?

Check **one** box in each row.

	<i>None</i>	<i>Little</i>	<i>Quite a lot</i>	<i>A great deal</i>
a) standardized tests produced outside the school ...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) teacher-made short answer or essay tests that require students to describe or explain their reasoning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) teacher made multiple choice, true-false and				

20. How often do you use the assessment information you gather from students to...

*Check **one** box in each row.*

	<i>None</i>	<i>Little</i>	<i>Quite a lot</i>	<i>A great deal</i>
a) provide students' grades or marks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>