



Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

School Questionnaire

Grade 9

Human Sciences Research Council
134 Pretorius Street, Pretoria, 0002
South Africa

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TIMSS & PIRLS
International Study Center
Lynch School of Education
BOSTON COLLEGE

School Questionnaire

Your school has agreed to participate in TIMSS 2019 (Trends in International Mathematics and Science Study), an educational research project sponsored by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS measures trends in learner achievement in mathematics and science and studies differences in national education systems in almost 60 countries in order to help improve teaching and learning worldwide.

This questionnaire is addressed to school principals and department heads who are asked to supply information about their schools. Since your school has been selected as part of a nationwide sample, your responses are very important in helping to describe secondary education in South Africa.

It is important that you answer each question carefully so that the information provided reflects the situation in your school as accurately as possible. Some of the questions will require that you look up school records, so you may wish to arrange for the assistance of another staff member to help provide this information.

Since TIMSS is an international study and all countries are using the same questionnaire, you may find that some of the questions seem unusual or are not entirely relevant to you or schools in South Africa. Nevertheless, it is important that you do your best to answer all of the questions so comparisons can be made across countries in the study.

It is estimated that you will need approximately 30 minutes to complete this questionnaire. We appreciate the time and effort that this takes and thank you for your cooperation and contribution.

When you have completed the questionnaire, please return it to the test administrator.

Thank you.

TIMSS 2019

School Enrolment and Characteristics

1

What is the total enrolment of learners in your school as of 1 August 2019?

_____ learners
Write in the number.

2

A. What is the total enrolment of Grade 9 learners in your school as of 1 August 2019?

_____ learners
Write in the number.

B. What is the fee-paying status of your school?

Tick **one** circle only.

Fee-paying school ---

No-fee school ---

C. What is the quintile ranking of your school?

Tick **one** circle only.

Quintile 1 ---

Quintile 2 ---

Quintile 3 ---

Quintile 4 ---

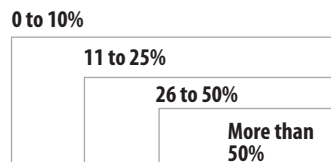
Quintile 5 ---

Independent school ---

3

Approximately what percentage of learners in your school have the following backgrounds?

Tick **one** circle for each line.



a) Come from economically disadvantaged homes ----- --- --- ---

b) Come from economically affluent homes ----- --- --- ---

c) Receive a social grant ----- --- --- ---

4

Approximately what percentage of learners in your school have English as their home language?

Tick **one** circle only.

More than 90% ---

76 to 90% ---

51 to 75% ---

26 to 50% ---

25% or less ---

5

A. How many people live in the city, town, or area where your school is located?

Tick **one** circle only.

More than 500 000 people ---

100 001 to 500 000 people ---

50 001 to 100 000 people ---

30 001 to 50 000 people ---

15 001 to 30 000 people ---

3 001 to 15 000 people ---

3 000 people or fewer ---

B. Which best describes the immediate area in which your school is located?

Tick **one** circle only.

Urban—Densely populated ---

Suburban—On fringe or outskirts of urban area ---

Medium size city or large town ---

Small town or village ---

Remote rural ---

6

Does your school provide free meals for learners?

Tick **one** circle for each line.

Yes, for all learners
 Yes, for some learners
 No

a) Breakfast ----- — —

b) Lunch ----- — —

7

For the Grade 9 learners in your school:

A. How many days per year is your school open for teaching and learning?

_____ days
 Write in the number.

B. What is the total teaching time, excluding breaks, in a typical day?

_____ minutes
 Write in the number of minutes per day.
 Please convert the number of hours into minutes.

C. In one calendar week, how many days is the school open for teaching and learning?

Tick **one** circle only.

- 6 days ---
- 5 1/2 days ---
- 5 days ---
- 4 1/2 days ---
- 4 days ---
- Other ---

D. How many days of teaching and learning are lost due to extracurricular activities (such as sport or cultural activities) per year?

_____ days
 Write in the number.

8

A. Does your school provide a place where learners can work on their schoolwork before or after school?

*Tick **one** circle only.*

Yes ---

No ---

(If No, go to #9)

If Yes,

B. Is someone available to assist them with their schoolwork?

*Tick **one** circle only.*

Yes ---

No ---

9

How many computers (including tablets and iPads) does your school have for use by Grade 9 learners?

_____ computers

Write in the number.

10

A. Does your school have a science laboratory that can be used by Grade 9 learners?

*Tick **one** circle only.*

Yes ---

No ---

B. Do educators usually have assistants available when learners are conducting science experiments?

*Tick **one** circle only.*

Yes ---

No ---

11

Does your school use an online learning management system to support learning (e.g. educator-learner communication, management of grades, learner access to course materials)?

*Tick **one** circle only.*

Yes ---

No ---

12

A. Does your school have a school library?

Tick one circle only.

Yes ---

No ---

(If No, go to #12F)

13

Does your school provide learners access to digital learning resources (e.g. books, videos)?

Tick one circle only.

Yes ---

No ---

If Yes,

B. Approximately how many books (print) with different titles does your school library have (exclude magazines and periodicals)?

Tick one circle only.

2 000 books or fewer ---

More than 2 000 books ---

C. Approximately how many titles of magazines and other periodicals (print and digital) does your school library have?

Tick one circle in each column.

	Print	Digital
0-----	<input type="radio"/>	<input type="radio"/>
1 to 5-----	<input type="radio"/>	<input type="radio"/>
6 to 10-----	<input type="radio"/>	<input type="radio"/>
11 to 30-----	<input type="radio"/>	<input type="radio"/>
31 or more-----	<input type="radio"/>	<input type="radio"/>

D. Does your school have a specialist librarian?

Tick one circle only.

Yes ---

No ---

E. Are learners permitted to take library books home?

Tick one circle only.

Yes ---

No ---

F. Does your school have classroom libraries?

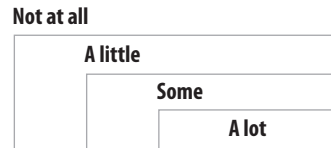
Tick one circle only.

Yes ---

No ---

How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following?

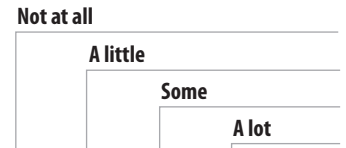
Tick **one** circle for each line.



A. General School Resources

- a) Instructional materials (e.g., textbooks) ----- — — —
- b) Supplies (e.g., papers, pencils, materials) ----- — — —
- c) School buildings and grounds ----- — — —
- d) Heating/cooling and lighting systems ----- — — —
- e) Instructional space (e.g., classrooms) ----- — — —
- f) Technologically competent staff ----- — — —
- g) Audio-visual resources for delivery of instruction (e.g., interactive white boards, digital projectors) ----- — — —
- h) Computer technology for teaching and learning (e.g., computers or tablets for learner use) ----- — — —
- i) Resources for learners with disabilities ----- — — —
- j) Working flush toilets ----- — — —

Tick **one** circle for each line.



B. Resources for Mathematics Instruction

- a) Educators with a specialisation in mathematics ----- — — —
- b) Computer software/ applications for mathematics instruction ----- — — —
- c) Library resources relevant to mathematics instruction --- — — —
- d) Calculators for mathematics instruction ----- — — —
- e) Concrete objects or materials to help learners understand quantities or procedures ----- — — —

C. Resources for Science Instruction

- a) Educators with a specialisation in science ----- — — —
- b) Computer software/ applications for science instruction ----- — — —
- c) Library resources relevant to science instruction ----- — — —
- d) Calculators for science instruction ----- — — —
- e) Science equipment and materials for experiments ----- — — —

15

How would you characterise each of the following within your school?

*Tick **one** circle for each line.*

	Very high _____ High _____ Medium _____ Low _____ Very low _____
a) Educators' understanding of the school's curricular goals	-----○-----○-----○-----○-----○
b) Educators' degree of success in implementing the school's curriculum	-----○-----○-----○-----○-----○
c) Educators' expectations for learner achievement	-----○-----○-----○-----○-----○
d) Educators' ability to inspire learners	-----○-----○-----○-----○-----○
e) Educators working together to improve learner achievement	-----○-----○-----○-----○-----○
f) Educators' job satisfaction	-----○-----○-----○-----○-----○
g) Parental involvement in school activities	-----○-----○-----○-----○-----○
h) Parental commitment to ensure that learners are ready to learn	-----○-----○-----○-----○-----○
i) Parental expectations for learner achievement	-----○-----○-----○-----○-----○
j) Parental support for learner achievement	-----○-----○-----○-----○-----○
k) Parental pressure for the school to maintain high academic standards	-----○-----○-----○-----○-----○
l) Learners' desire to do well in school	-----○-----○-----○-----○-----○
m) Learners' ability to reach school's academic goals	-----○-----○-----○-----○-----○
n) Learners' respect for classmates who excel academically	-----○-----○-----○-----○-----○

16

How much do you agree with these statements about mathematics and science education within your school?

*Tick **one** circle for each line.*

	Agree a lot _____ Agree a little _____ Disagree a little _____ Disagree a lot _____
a) The school provides learners with information about career options in mathematics and science	-----○-----○-----○-----○-----○
b) The school has initiatives to promote learner interest in mathematics and science (e.g., learner clubs, competitions)	-----○-----○-----○-----○-----○
c) The school promotes professional development for educators of mathematics and science	-----○-----○-----○-----○-----○
d) The school provides extra lessons to help learners excel in mathematics and science	-----○-----○-----○-----○-----○
e) The school provides special activities in mathematics and science for interested learners	-----○-----○-----○-----○-----○
f) The school has a specific goal to improve mathematics and science education	-----○-----○-----○-----○-----○
g) The school encourages learners to continue studying mathematics and science in the future	-----○-----○-----○-----○-----○
h) Mathematics and science educators in this school spend extra time working with learners interested in mathematics and science	-----○-----○-----○-----○-----○

17

To what degree is each of the following a problem among Grade 9 learners in your school?

Tick **one** circle for each line.

	Not a problem	Minor problem	Moderate problem	Serious problem
a) Arriving late at school -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Absenteeism (i.e., unjustified absences) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Classroom disturbance -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d) Cheating -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e) Profanity -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f) Vandalism -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g) Theft -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h) Intimidation or verbal abuse among learners (including texting, emailing, etc.) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i) Physical injury to other learners -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j) Intimidation or verbal abuse of educators or staff (including texting, emailing, etc.) -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k) Physical injury to educators or staff -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18

How difficult was it to fill Grade 9 teaching vacancies for this school year for the following subjects?

Tick **one** circle for each line.

	Not a problem	Minor problem	Moderate problem	Serious problem
a) Mathematics -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Science -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c) Other -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19

To what degree is each of the following a problem among educators in your school?

Tick **one** circle for each line.

	Not a problem	Minor problem	Moderate problem	Serious problem
a) Arriving late or leaving early --	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b) Absenteeism -----	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Principal Experience and Education

20

By the end of this school year, how many years will you have been a principal altogether?

_____ years

Please **round** to the nearest whole number.

21

By the end of this school year, how many years will you have been a principal at this school?

_____ years

Please **round** to the nearest whole number.

22

What is the highest level of formal education you have completed?

Tick **one** circle only.

Did not complete First Degree ---

Bachelor's Degree ---

Honour's Degree ---

Master's Degree ---

Doctoral Degree ---

23

Do you hold the following qualifications or credentials in educational leadership?

Tick **one** circle for each line.

- | | Yes | No |
|--|-----------------------|-----------------------|
| a) Advanced Certificate in Education (ACE) ----- | <input type="radio"/> | <input type="radio"/> |
| b) Master's Degree ----- | <input type="radio"/> | <input type="radio"/> |
| c) Doctoral Degree ----- | <input type="radio"/> | <input type="radio"/> |

Thank You

Thank you for the thought, time, and effort you have put into completing this questionnaire.



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Grade 9



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