

SECTION 1.1: STUDENT QUESTIONNAIRE GRADE 4

TIMSS 2019 USER GUIDE FOR THE INTERNATIONAL DATABASE



Exhibit 1.1: International Context Variables for the TIMSS 2019 Student Questionnaire (Grade 4)

		ial Context variables for the Thiis 5 2019 Student Questionnaire	(3.443.7	
TIMSS	TIMSS		TIMSS	
2019	2019		2015	
Question	Variable	TIMSS 2019 Variable Description	Variable	Notes
Number	Name		Name	
		Analysis and an albayo		
SQG-01	ASBG01	Are you a girl or a boy?	ASBG01	
SQG-02a	ASBG02A	When were you born? Month	ASBG02A	
SQG-02b	ASBG02B	When were you born? Year	ASBG02B	
SQG-03	ASBG03	How often do you speak <language of="" test=""> at home?</language>	ASBG03	
SQG-04	ASBG04	About how many books are there in your home? (Do not count magazines, newspapers, or your school books.)	ASBG04	
SQG-05a	ASBG05A	Do you have any of these things at your home? A computer or tablet	ASBG05A, ASBG05B	Modified wording in 2019
SQG-05b	ASBG05B	Do you have any of these things at your home? Study desk/table for your use	ASBG05C	
SQG-05c	ASBG05C	Do you have any of these things at your home? Your own room	ASBG05D	
SQG-05d	ASBG05D	Do you have any of these things at your home? Internet connection	ASBG05E	
SQG-05e	ASBG05E	Do you have any of these things at your home? Your own mobile phone	ASBG05F	
SQG-05f	ASBG05F	Do you have any of these things at your home? <country-specific indicator<="" td=""><td></td><td></td></country-specific>		
		of wealth>		
SQG-05g	ASBG05G	Do you have any of these things at your home? <country-specific indicator="" of="" wealth=""></country-specific>		
SQG-05h	ASBG05H	Do you have any of these things at your home? <country-specific indicator="" of="" wealth=""></country-specific>		
SQG-05i	ASBG05I	Do you have any of these things at your home? <country-specific indicator="" of="" wealth=""></country-specific>	ASBG05K	
SQG-06A	ASBG06A	Were your <parents guardians=""> born in <country>? <parent a="" guardian=""></parent></country></parents>	ASBG06A	Modified wording and response options in 2019
SQG-06B	ASBG06B	Were your <parents guardians=""> born in <country>? <parent b="" guardian=""></parent></country></parents>	ASBG06B	Modified wording and response options in 2019
SQG-07	ASBG07	Were you born in <country>?</country>	ASBG07	
SQG-08	ASBG08	About how often are you absent from school?	ASBG08	Modified response options in 2019
SQG-09a	ASBG09A	How often do you feel this way when you arrive at school? I feel tired		
SQG-09b	ASBG09B	How often do you feel this way when you arrive at school? I feel hungry		
SQG-10a	ASBG10A	What do you think about your school? Tell how much you agree with these statements. I like being in school	ASBG11A	
SQG-10b	ASBG10B	What do you think about your school? Tell how much you agree with these statements. I feel safe when I am at school	ASBG11B	
SQG-10c	ASBG10C	What do you think about your school? Tell how much you agree with these statements. I feel like I belong at this school	ASBG11C	
SQG-10d	ASBG10D	What do you think about your school? Tell how much you agree with these statements. Teachers at my school are fair to me	ASBG11E	
SQG-10e	ASBG10E	What do you think about your school? Tell how much you agree with these statements. I am proud to go to this school	ASBG11F	
SQG-11a	ASBG11A	During this school year, how often have other students from your school done any of the following things to you, including through texting or the Internet? Made fun of me or called me names	ASBG12A	
SQG-11b	ASBG11B	During this school year, how often have other students from your school done any of the following things to you, including through texting or the Internet? Left me out of their games or activities	ASBG12B	





Exhibit 1.1: International Context Variables for the TIMSS 2019 Student Questionnaire (Grade 4)

	AS0M8SA	How much do you agree with these statements about your mathematics	AS0M8SA	SQMS-03a
	ASOMAZA	mathematics? Mathematics is one of my favorite subjects.	VEUN1924	eeu-smos
	I10MB2A	How much do you agree with these statements about learning	IS0MBSA	SQMS-02i
		mathematics? I look forward to mathematics lessons		
	H10MB2A	How much do you agree with these statements about learning	HS0M8SA	SQMS-02h
		mathematics? I like to solve mathematics problems		
	DIOMBSA	How much do you agree with these statements about learning	ASBM02G	SQMS-02g
		mathematics? I like any schoolwork that involves numbers		
	ASBM01F	How much do you agree with these statements about learning	ASBM02F	SQMS-02f
	71.01415077	mathematics? I like mathematics	7701410017	070 014180
	ASBM01E	mathematics? I learn many interesting things in mathematics How much do you agree with these statements about learning	ASBM02E	SQMS-02e
	GLOMBSA	How much do you agree with these statements about learning mathematics.	ASBM02D	SQMS-02d
	CLOM92A	mathematics? Mathematics is boring	GCOMBSA	PCU 5MU5
	ASBM01C	How much do you agree with these statements about learning mathematics is being	YSBW05C	SQMS-02c
	Storida	mathematics? I wish I did not have to study mathematics	Scoriasv	3NO3
	A10MASA	How much do you agree with these statements about learning	ASBM02B	SQMS-02b
	arortae v	mathematics? I enjoy learning mathematics	40071407	100 01100
	ALOMBSA	How much do you agree with these statements about learning	AS0M8SA	SQMS-02a
		In mathematics lessons, how often do you work problems on your own?	PSBM01	SQMS-01
		Internet? Threatened me		
		done any of the following things to you, including through texting or the		
	ASBG12H	During this school year, how often have other students from your school	VEBG11K	200-11K
		Internet? Shared embarrassing photos of me online		
		done any of the following things to you, including through texting or the		
		During this school year, how often have other students from your school	LIFE	SQG-11j
		Internet? Shared nasty or hurtful things about me online		
		done any of the following things to you, including through texting or the		
		During this school year, how often have other students from your school	ILLDASA	SQG-111
		Internet? Sent me nasty or hurtful messages online		
		done any of the following things to you, including through texting or the		
		During this school year, how often have other students from your school	HIIDASA	206-111
		Internet? Made me do things I didn't want to do		
	IZI OCOV	done any of the following things to you, including through texting or the	OLLOGOY	611-020
	ASBG12F	Infernet? Hit or hurt me During this school year, how often have other students from your school	ASBG11G	SQG-11g
		done any of the following things to you, including through texting or the		
	ASBG12E	During this school year, how often have other students from your school	ASBG11F	5QG-11f
	70,000	Internet? Damaged something of mine on purpose	7,,OGO V	377 003
		done any of the following things to you, including through texting or the		
		During this school year, how often have other students from your school	ASBG11E	SQG-11e
		Internet? Stole something from me		., 536
		done any of the following things to you, including through texting or the		
	ASBG12D	During this school year, how often have other students from your school	ASBG11D	20G-119
		Internet? Spread lies about me		
		done any of the following things to you, including through texting or the		
	ASBG12C	During this school year, how often have other students from your school	ASBG11C	20G-11c
sətoM	2015 Variable Name	noitqinosəD əldsinsV 2019 Variable Description	2019 Variable Name	2019 Question Number
	SSMIT		SSMIT	SSMIT



Exhibit 1.1: International Context Variables for the TIMSS 2019 Student Questionnaire (Grade 4)

TIMSS	TIMSS		TIMSS	
2019 Question	2019 Variable	TIMSS 2019 Variable Description	2015 Variable	Notes
Number	Name		Name	
SQMS-03b	ASBM03B	How much do you agree with these statements about your mathematics lessons? My teacher is easy to understand	ASBM02B	
SQMS-03c	ASBM03C	How much do you agree with these statements about your mathematics lessons? My teacher has clear answers to my questions	ASBM02E	
SQMS-03d	ASBM03D	How much do you agree with these statements about your mathematics lessons? My teacher is good at explaining mathematics	ASBM02F	
SQMS-03e	ASBM03E	How much do you agree with these statements about your mathematics lessons? My teacher does a variety of things to help us learn	ASBM02H	
SQMS-03f	ASBM03F	How much do you agree with these statements about your mathematics lessons? My teacher explains a topic again when we don't understand		
SQMS-04a	ASBM04A	How often do these things happen in your mathematics lessons? Students don't listen to what the teacher says		
SQMS-04b	ASBM04B	How often do these things happen in your mathematics lessons? There is disruptive noise		
SQMS-04c	ASBM04C	How often do these things happen in your mathematics lessons? It is too disorderly for students to work well		
SQMS-04d	ASBM04D	How often do these things happen in your mathematics lessons? My teacher has to wait a long time for students to quiet down		
SQMS-04e	ASBM04E	How often do these things happen in your mathematics lessons? Students interrupt the teacher		
SQMS-04f	ASBM04F	How often do these things happen in your mathematics lessons? My teacher has to keep telling us to follow the classroom rules		
SQMS-05a	ASBM05A	How much do you agree with these statements about mathematics? I usually do well in mathematics	ASBM03A	
SQMS-05b	ASBM05B	How much do you agree with these statements about mathematics? Mathematics is harder for me than for many of my classmates	ASBM03B	
SQMS-05c	ASBM05C	How much do you agree with these statements about mathematics? I am just not good at mathematics	ASBM03C	
SQMS-05d	ASBM05D	How much do you agree with these statements about mathematics? I learn things quickly in mathematics	ASBM03D	
SQMS-05e	ASBM05E	How much do you agree with these statements about mathematics? Mathematics makes me nervous	ASBM03E	
SQMS-05f	ASBM05F	How much do you agree with these statements about mathematics? I am good at working out difficult mathematics problems	ASBM03F	
SQMS-05g	ASBM05G	How much do you agree with these statements about mathematics? My teacher tells me I am good at mathematics	ASBM03G	
SQMS-05h	ASBM05H	How much do you agree with these statements about mathematics? Mathematics is harder for me than any other subject	ASBM03H	
SQMS-05i	ASBM05I	How much do you agree with these statements about mathematics? Mathematics makes me confused	ASBM03I	
SQMS-06	ASBS06	In science lessons, how often does your teacher ask you to conduct science experiments?		
SQMS-07a	ASBS07A	How much do you agree with these statements about learning science? I enjoy learning science	ASBS04A	
SQMS-07b	ASBS07B	How much do you agree with these statements about learning science? I wish I did not have to study science	ASBS04B	
SQMS-07c	ASBS07C	How much do you agree with these statements about learning science? Science is boring	ASBS04C	





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TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
SQMS-07d	ASBS07D	How much do you agree with these statements about learning science? I learn many interesting things in science	ASBS04D	
SQMS-07e	ASBS07E	How much do you agree with these statements about learning science? I like science	ASBS04E	
SQMS-07f	ASBS07F	How much do you agree with these statements about learning science? I look forward to learning science in school	ASBS04F	
SQMS-07g	ASBS07G	How much do you agree with these statements about learning science? Science teaches me how things in the world work	ASBS04G	
SQMS-07h	ASBS07H	How much do you agree with these statements about learning science? I like to do science experiments	ASBS04H	
SQMS-07i	ASBS07I	How much do you agree with these statements about learning science? Science is one of my favorite subjects	ASBS04I	
SQMS-08a	ASBS08A	How much do you agree with these statements about your science lessons? I know what my teacher expects me to do	ASBS05A	
SQMS-08b	ASBS08B	How much do you agree with these statements about your science lessons? My teacher is easy to understand	ASBS05B	
SQMS-08c	ASBS08C	How much do you agree with these statements about your science lessons? My teacher has clear answers to my questions	ASBS05E	
SQMS-08d	ASBS08D	How much do you agree with these statements about your science lessons? My teacher is good at explaining science	ASBS05F	
SQMS-08e	ASBS08E	How much do you agree with these statements about your science lessons? My teacher does a variety of things to help us learn	ASBS05H	
SQMS-08f	ASBS08F	How much do you agree with these statements about your science lessons? My teacher explains a topic again when we don't understand		
SQMS-09a	ASBS09A	How much do you agree with these statements about science? I usually do well in science	ASBS06A	
SQMS-09b	ASBS09B	How much do you agree with these statements about science? Science is harder for me than for many of my classmates	ASBS06B	
SQMS-09c	ASBS09C	How much do you agree with these statements about science? I am just not good at science	ASBS06C	
SQMS-09d	ASBS09D	How much do you agree with these statements about science? I learn things quickly in science	ASBS06D	
SQMS-09e	ASBS09E	How much do you agree with these statements about science? My teacher tells me I am good at science	ASBS06E	
SQMS-09f	ASBS09F	How much do you agree with these statements about science? Science is harder for me than any other subject	ASBS06F	
SQMS-09g	ASBS09G	How much do you agree with these statements about science? Science makes me confused	ASBS06G	





Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

Student Questionnaire

<Grade 4>

<TIMSS National Research Center Name>
<Address>

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International Study Center
Lynch School of Education
BOSTON COLLEGE



Directions

In this booklet, you will find questions about you and what you think. For each question, you should choose the answer you think is best.

Let us take a few minutes to practice the kinds of questions you will answer in this booklet.

Example 1 is one kind of question you will find in this booklet.

Example 1

Do you go to school?

Fill **one** circle only.

Yes -- ()

No -- ()

Example 2 is another kind of question you will find in this booklet.

Example 2

How often do you do these things?

		Every day or almost every day	Once or twice a week	Once or twice a month	Never or almost never
a)	I talk with my friends	*			
b)	I play sports				
c)	I ride a skateboard		O		





Example 3 is another kind of question you will find in this booklet.

Example 3

What do you think? Tell how much you agree with these statements.

		Agree a lot	Agree a little	Disagree a little	Disagree a lot
a)	Watching movies is fun		<u> </u>	<u> </u>	
/	I like eating ice cream	-			
	I do not like waking up early				\Box
d)	I enjoy doing chores				

- Read each question carefully, and pick the answer you think is best.
- Fill in the circle next to or under your answer.
- If you decide to change your answer, draw an X through your first answer, like this: X. Then, fill in the circle next to or under your new answer.
- Ask for help if you do not understand something or are not sure how to answer.





About you

G1 **-**

Are you a girl or a boy?

ASBG01

Fill **one** circle only.

Girl -- ()

Boy -- ()

G2

When were you born?

Fill the circles next to the month and year you were born.

ASBG02A

ASBG02B

a)	Mo	ntŀ

January -- ()

February -- \bigcirc

March -- 🔘 April -- 🔘

May -- \bigcirc

June -- ()

July -- 🔘

August -- 🔘

September -- ()

October -- ()

November -- () December -- ()

b) Year

2006 -- 🔾

2007 -- 🔾

2008 -- 🔘 2009 -- 🔘

2010 -- 🔘

2011 -- () 2012 -- 🔘

Other -- \bigcirc

<Grade 4> Student Questionnaire





G3 _

How often do you speak <language of test> at home?

ASBG03	Fill one circle only.
	I always speak <language of="" test=""> at home ()</language>
	I almost always speak <language of="" test=""> at home ()</language>
	I sometimes speak <language< td=""></language<>

of test> and sometimes speak

I never speak <language of test> at home -- ()

another language at home -- \bigcirc





G4 —

About how many books are there in your home? (Do not count magazines, newspapers, or your school books.)

count magazines, newspapers, o	your senoor books.
ASBG04	Fill one circle only.
None or very few (0–10 books) -	This shows 10 books
Enough to fill one shelf (11–25 books) -	This shows 25 books
Enough to fill one bookcase (26–100 books) -	This shows 100 books
Enough to fill two bookcases (101–200 books) -	This shows 200 books
Enough to fill three or more bookcases (more than 200) -	This shows more than 200 books



4		
Ĺ	J	O

Do you have any of these things at your home?

			Yes	N
ASBG05A	a)	A computer or tablet	- 0	_Č
ASBG05B	b)	Study desk/table for your use	- 🔾	- C
ASBG05C	c)	Your own room	- 🔾 —	- C
ASBG05D	d)	Internet connection	- 🔾	- C
ASBG05E	e)	Your own mobile phone	- 🔾	- C
ASBG05F	f)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	- 🔾	- C
ASBG05G	g)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	- 🔾	- C
ASBG05H	h)	<pre><country-specific indicator="" of="" wealth=""></country-specific></pre>	- 🔾	- C
ASBG05I	i)	<pre><country-specific indicator="" of<="" pre=""></country-specific></pre>	\bigcirc	



The following question is about your <Parent/Guardian A> and wer one

for Parent/Guar	an B>. <if an<br="" guardian,="" have="" one="" only="" parent="" you="">dian A. If you have two parents/guardians, choos dian A and the other for Parent/Guardian B.></if>	.s se
G6		
	<pre><parents guardians=""> born in <country>?</country></parents></pre>	
A. <parent gu<="" th=""><th>ardian A></th><th></th></parent>	ardian A>	
ASBG06A		
	Fill one circle only.	
	Yes 🔾	
	No ()	
	I don't know 🔘	
	Not applicable 🔘	
B. <parent g<="" td=""><td>uardian B></td><td></td></parent>	uardian B>	
ASBG06B	Fill one circle only.	
	Yes 🔾	
	No ()	
	I don't know 🔘	
	Not applicable 🔾	
G7		
	orn in <country>?</country>	
ASBG07	Fill one circle only.	
	Yes 🔾	
	No 🔾	

<Grade 4> Student Questionnaire





ASBG08	Fill one circle only.
	Once a week \bigcirc
	Once every two weeks \bigcirc
	Once a month \bigcirc
	Once every two months \bigcirc
	Never or almost never \bigcirc
G9	ften do you feel this way when you arrive at school

b) I feel hungry ------ —

ASBG09B



Your School

G10 ____

What do you think about your school? Tell how much you agree with these statements.

			Agree a lot	Agree a little	Disagree a little	Disagree a lot
			•	•	•	•
ASBG10A	a)	I like being in school	- () ———	-0	-0	
ASBG10B	b)	I feel safe when I am at school	- 0			
ASBG10C	c)	I feel like I belong at this school	- 0	-0	-0	
ASBG10D	d)	Teachers at my school are				
	,	fair to me	- 0	-0	-0	
ASBG10E	e)	I am proud to go to this school	- 0	-O	<u> </u>	



G11___

During this school year, how often have other students from your school done any of the following things to you, including through texting or the Internet?

			At least once a week	Once or twice a month	A few times a year	Never
ASBG11A	a)	Made fun of me or called me names	💍		-0-	
ASBG11B	b)	Left me out of their games or activities	()		-0	_0
ASBG11C	c)	Spread lies about me	\(\)		-0	
ASBG11D	d)	Stole something from me	\(\)		-0	
ASBG11E	e)	Damaged something of mine on purpose	()		-0	_0
ASBG11F	f)	Hit or hurt me (e.g., shoving, hitting, kicking)			-0-	_0
ASBG11G	g)	Made me do things I didn't want to do		-0	-0	_0
ASBG11H	h)	Sent me nasty or hurtful messages online	()		-0	_0
ASBG11I	i)	Shared nasty or hurtful things about me online			-0-	_0
ASBG11J	j)	Shared embarrassing photos of me online	()		-0-	_0
ASBG11K	k)	Threatened me				





Mathematics in school

MS1 ____

In mathematics lessons, how often do you work problems on your own?				
ASBM01	Fill one circle only.			
	Every or almost every lesson \bigcirc			
	About half the lessons \bigcirc			
	Some lessons 🔘			
	Never 🔘			





MS2 ___

How much do you agree with these statements about learning mathematics?

			Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBM02A	a)	I enjoy learning mathematics	—	-0-	· O	
ASBM02B	b)	I wish I did not have to study mathematics		0		
ASBM02C	c)	Mathematics is boring				
ASBM02D	d)	I learn many interesting things in mathematics		-O		
ASBM02E	e)	I like mathematics			- O	
ASBM02F	f)	I like any schoolwork that involves numbers				
ASBM02G	g)	I like to solve mathematics problems				
ASBM02H	h)	I look forward to mathematics lessons		-0	0	
ASBM02I	i)	Mathematics is one of my favorite subjects		-0		





MS3 ___

How much do you agree with these statements about your <u>mathematics lessons</u>?

 $Fill \ one \ circle \ for \ each \ line.$

			Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBM03A	a)	I know what my teacher expects me to do	- 0	-0-	-0-	
ASBM03B	b)	My teacher is easy to understand	- 0		-0	
ASBM03C	c)	My teacher has clear answers to my questions	- 0	0	-0	
ASBM03D	d)	My teacher is good at explaining mathematics	- ()	0	-0	
ASBM03E	e)	My teacher does a variety of things to help us learn	- ()	0	-0	
ASBM03F	f)	My teacher explains a topic again when we don't understand	- 0	0	-0	



MS4 __

How often do these things happen in your mathematics lessons?

 $Fill \ one \ circle \ for \ each \ line.$

			Every or almost every lesson	About half the lessons	Some lessons	Never
ASBM04A	a)	Students don't listen to what the teacher says	0			
ASBM04B	b)	There is disruptive noise	0	_0_		
ASBM04C	c)	It is too disorderly for students to work well	🔾	_0_		
ASBM04D	d)	My teacher has to wait a long time for students to quiet down	()			
ASBM04E	e)	Students interrupt the teacher	0	_0_		
ASBM04F	f)	My teacher has to keep telling us to follow the classroom rules	()	_0_	_0_	





MS5 ____

How much do you agree with these statements about mathematics?

			Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBM05A	a)	I usually do well in mathematics	- 💍 ——	-Ŏ	-Ŏ	
ASBM05B	b)	Mathematics is harder for me than for many of my classmates	- ()	O	O	
ASBM05C	c)	I am just not good at mathematics	- 0	-0	-0	
ASBM05D	d)	I learn things quickly in mathematics	- ()	-O		
ASBM05E	e)	Mathematics makes me nervous	- 0	-0	-0	
ASBM05F	f)	I am good at working out difficult mathematics problems	- 0		-0	
ASBM05G	g)	My teacher tells me I am good at mathematics	- 0	-0	-0	
ASBM05H	h)	Mathematics is harder for me than any other subject	- 0	-0	-0	
ASBM05I	i)	Mathematics makes me confused	- 0	-0	-0	



Science in school

MS6 ____

to conduc	t science experiments?)
ASBS06		Fill one circle only.
	At least once a week	\bigcirc
	Once or twice a month	\bigcirc

A few times a year -- \bigcirc

In science lessons, how often does your teacher ask you

Never -- 🔘





MS7 ____

How much do you agree with these statements about learning science?

Fill one circle for each line.

ASBS07A	a)	I enjoy learning science	Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBS07B	b)	I wish I did not have to study science	()	-0	-0	-0
ASBS07C	c)	Science is boring	- 0	-0	-0	_
ASBS07D	d)	I learn many interesting things in science	(-0		-0
ASBS07E	e)	I like science	- 0	-0	-0	
ASBS07F	f)	I look forward to learning science in school	- 0	-0	-0	-0
ASBS07G	g)	Science teaches me how things in the world work	- 0	-0	-0	-0
ASBS07H	h)	I like to do science experiments	- 0	-0	-0	
ASBS07I	i)	Science is one of my favorite subjects	- ()	-0	-0	-0



<Grade 4> Student Questionnaire





|--|

How much do you agree with these statements about your <u>science lessons</u>?

			Agree a lot	Agree a little	Disagree a little	Disagree a lot
ASBS08A	a)	I know what my teacher expects me to do	Ŏ		<u> </u>	
ASBS08B	b)	My teacher is easy to understand	\bigcirc			
ASBS08C	c)	My teacher has clear answers to my questions	0		0	
ASBS08D	d)	My teacher is good at explaining science	O		O	
ASBS08E	e)	My teacher does a variety of things to help us learn	O		O	
ASBS08F	f)	My teacher explains a topic again when we don't understand	O		<u> </u>	





MS9 _____

How much do you agree with these statements about science?

Fill one circle for each line.

ASBS09A	a)	I usually do well in science	Agree a lot	Agree a little	Disagree a little	Disagree a lot
	• • •					
ASBS09B	b)	Science is harder for me than for many of my classmates	- 🔾	-0	-0	
ASBS09C	c)	I am just not good at science	- 🔾	-0		_
ASBS09D	d)	I learn things quickly in science	- 🔾	-0	-0-	
ASBS09E	e)	My teacher tells me I am good at science	- 🔾	-0		
ASBS09F	f)	Science is harder for me than any other subject	- 🔾		-0	
ASBS09G	g)	Science makes me confused	- 🔾	-0	-0	

19

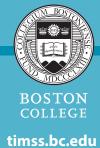


Thank You!

Thank you for filling out the questionnaire!







<Grade 4>



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Educational Achievement



SECTION 1.2: STUDENT QUESTIONNAIRE— eTIMSS SUPPLEMENT 10110 GRADE 4

TIMSS 2019 USER GUIDE FOR THE INTERNATIONAL DATABASE

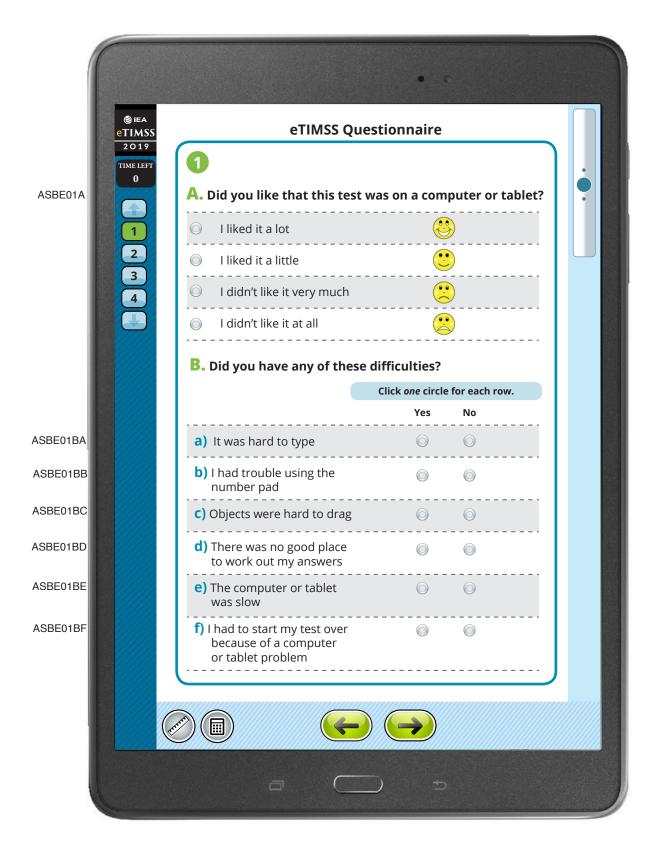


Exhibit 1.2: International Context Variables for the TIMSS 2019 Student Questionnaire—eTIMSS Supplement (Grade 4)

(Grade 4)		
TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description
SQE-01A	ASBE01A	Did you like that this test was on a computer or tablet?
SQE-01Ba	ASBE01BA	Did you have any of these difficulties? It was hard to type
SQE-01Bb	ASBE01BB	Did you have any of these difficulties? I had trouble using the number pad
SQE-01Bc	ASBE01BC	Did you have any of these difficulties? Objects were hard to drag
SQE-01Bd	ASBE01BD	Did you have any of these difficulties? There was no good place to work out my answers
SQE-01Be	ASBE01BE	Did you have any of these difficulties? The computer or tablet was slow
SQE-01Bf	ASBE01BF	Did you have any of these difficulties? I had to start my test over because of a computer or tablet problem
SQE-02a	ASBE02A	At school this year, how often did you use a computer or tablet to do each of the following? Work on a school assignment such as a paper, report, or presentation
SQE-02b	ASBE02B	At school this year, how often did you use a computer or tablet to do each of the following? Mathematics schoolwork
SQE-02c	ASBE02C	At school this year, how often did you use a computer or tablet to do each of the following? Science schoolwork
SQE-02d	ASBE02D	At school this year, how often did you use a computer or tablet to do each of the following? Take a test or quiz
SQE-03a	ASBE03A	How much do you agree with these statements? I am good at using a computer
SQE-03b	ASBE03B	How much do you agree with these statements? I am good at typing
SQE-03c	ASBE03C	How much do you agree with these statements? I can use a touchscreen on a computer, tablet, or smartphone
SQE-03d	ASBE03D	How much do you agree with these statements? It is easy for me to find information on the Internet
SQE-03e	ASBE03E	How much do you agree with these statements? I can look up the meanings of words on the Internet
SQE-03f	ASBE03F	How much do you agree with these statements? I can write sentences and paragraphs using a computer
SQE-03g	ASBE03G	How much do you agree with these statements? I can edit text on a computer





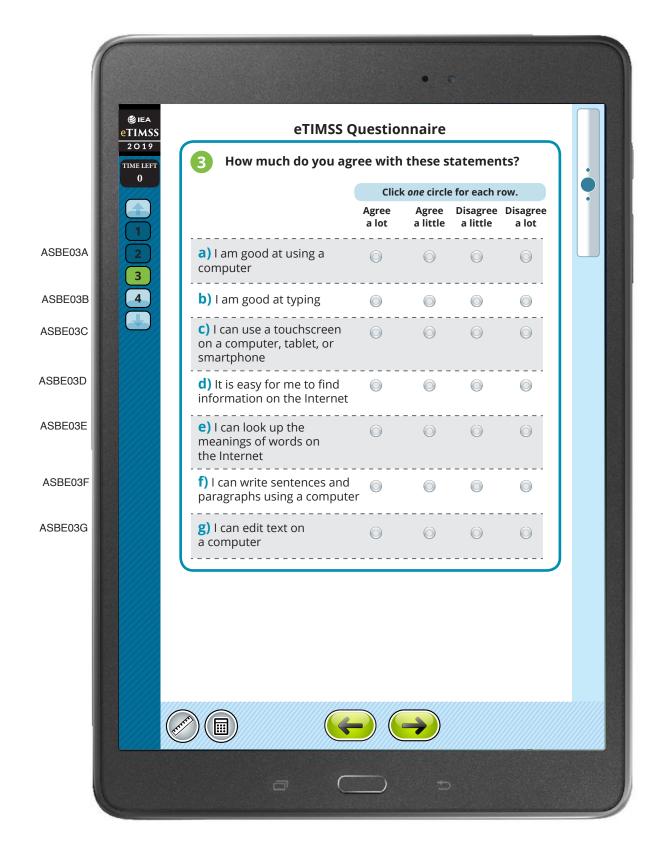






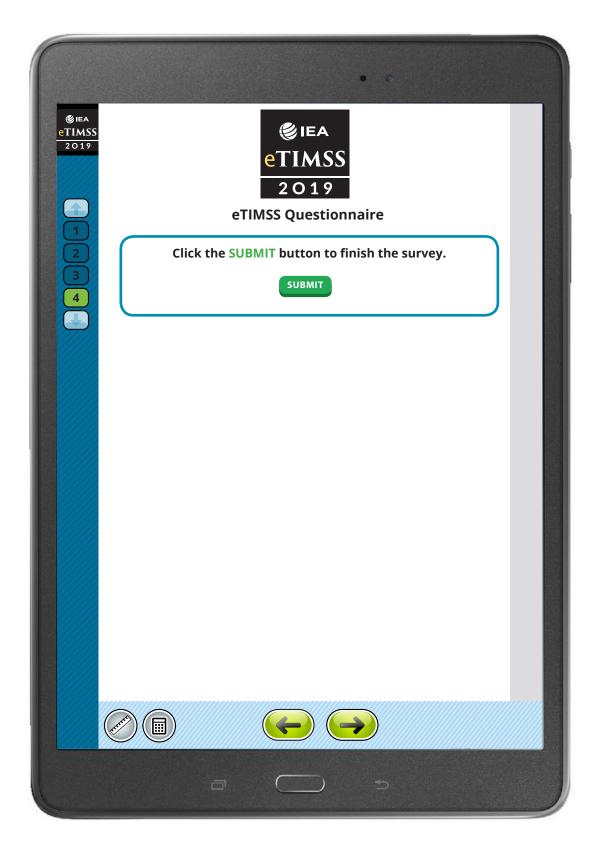
















SECTION 1.4: TEACHER QUESTIONNAIRE 1011001 GRADE 4

TIMSS 2019 USER GUIDE FOR THE INTERNATIONAL DATABASE



Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

= 111	· internation	ial Context variables for the Tiwo5 2019 Teacher Questionnaire	(Grado i)	
TIMSS	TIMSS		TIMSS	
2019	2019	TIMOS COMO VICTOR DE LA CO	2015	
Question	Variable	TIMSS 2019 Variable Description	Variable	Notes
Number	Name		Name	
TQG-01	ATBG01	By the end of this school year, how many years will you have been teaching altogether?	ATBG01	
TQG-02	ATBG02	Are you male or female?	ATBG02	
TQG-03	ATBG03	How old are you?	ATBG03	
TQG-04	ATBG04	What is the highest level of formal education you have completed?	ATBG04	
TQG-05Aa	ATBG05AA	During your <post-secondary> education, what was your major or main area(s) of study? Education—Primary/Elementary</post-secondary>	ATBG05AA	
TQG-05Ab	ATBG05AB	During your <post-secondary> education, what was your major or main area(s) of study? Education—Secondary</post-secondary>	ATBG05AB	
TQG-05Ac	ATBG05AC	During your <post-secondary> education, what was your major or main area(s) of study? Mathematics</post-secondary>	ATBG05AC	
TQG-05Ad	ATBG05AD	During your <post-secondary> education, what was your major or main area(s) of study? Science</post-secondary>	ATBG05AD	
TQG-05Ae	ATBG05AE	During your <post-secondary> education, what was your major or main area(s) of study? <language of="" test=""></language></post-secondary>	ATBG05AE	
TQG-05Af	ATBG05AF	During your <post-secondary> education, what was your major or main area(s) of study? Other</post-secondary>	ATBG05AF	
TQG-05Ba	ATBG05BA	If your major or main area of study was education, did you have a <pre><specialization> in any of the following? Mathematics</specialization></pre>	ATBG05BA	
TQG-05Bb	ATBG05BB	If your major or main area of study was education, did you have a <pre><specialization> in any of the following? Science</specialization></pre>	ATBG05BB	
TQG-05Bc	ATBG05BC	If your major or main area of study was education, did you have a <specialization> in any of the following? Language/reading</specialization>	ATBG05BC	
TQG-05Bd	ATBG05BD	If your major or main area of study was education, did you have a <specialization> in any of the following? Other subject</specialization>	ATBG05BD	
TQG-06a	ATBG06A	How would you characterize each of the following within your school? Teachers' understanding of the school's curricular goals	ATBG06A	
TQG-06b	ATBG06B	How would you characterize each of the following within your school? Teachers' degree of success in implementing the school's curriculum	ATBG06B	
TQG-06c	ATBG06C	How would you characterize each of the following within your school? Teachers' expectations for student achievement	ATBG06C	
TQG-06d	ATBG06D	How would you characterize each of the following within your school? Teachers' ability to inspire students	ATBG06E	
TQG-06e	ATBG06E	How would you characterize each of the following within your school? Parental involvement in school activities	ATBG06F	
TQG-06f	ATBG06F	How would you characterize each of the following within your school? Parental commitment to ensure that students are ready to learn	ATBG06G	
TQG-06g	ATBG06G	How would you characterize each of the following within your school? Parental expectations for student achievement	ATBG06H	
TQG-06h	ATBG06H	How would you characterize each of the following within your school? Parental support for student achievement	ATBG06I	
TQG-06i	ATBG06I	How would you characterize each of the following within your school? Students' desire to do well in school	ATBG06K	
TQG-06j	ATBG06J	How would you characterize each of the following within your school? Students' ability to reach school's academic goals	ATBG06L	
TQG-06k	ATBG06K	How would you characterize each of the following within your school? Students' respect for classmates who excel academically	ATBG06M	Modified wording in 2019





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

	DY0D8TA	or disagree with each of the following statements. This school has clear rules about student conduct Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements. This school's rules are or disagree with each of the following statements. This school's rules are enforced in a fair and consistent manner.	HTGG07H	ТQG-07g ТQG-07h
	ATBG07F	respectful of the teachers Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements. The students respect school property Thinking about your current school, indicate the extent to which you agree	ATBG07F 5Y05BTA	TQG-07f
	ATBG07E	or disagree with each of the following statements. The students behave in an orderly manner Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements. The students are	ATBG07E	1QG-07e
	OT058TA GT058TA	Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements. This school's security policies and practices are sufficient Thinking about your current school, indicate the extent to which you agree	ATBG07C	7QG-07c
	ATBG07A	Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements. This school is located in a safe neighborhood Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements. I feel safe at this school or disagree with each of the following statements. I feel safe at this school	ATBG07B ATBG07B	TQG-07a
6102 ni	DS058TA	How would you characterize each of the following within your school? Collaboration between school leadership (including master teachers) and teachers to plan instruction Thinking about your surrors school indicate the which you across	ATBG06L	190-901
sətoN əl	2015 2015 Variable Bame Danable	TIMSS 2019 Variable Description	ZONS 2019 Variable Mame	Z019 Question Mumber



Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

LAIIIDIL 1.7	. IIIternation	ial Context variables for the TIMSS 2019 Teacher Questionnaire	(Orace 4)	
TIMSS 2019	TIMSS 2019	TIMES 2010 Variable Description	TIMSS 2015	Notes
Question Number	Variable Name	TIMSS 2019 Variable Description	Variable Name	Notes
TQG-09g	ATBG09G	Indicate the extent to which you agree or disagree with each of the	ATBG11G	
		following statements. I have difficulty keeping up with all of the changes to the curriculum		
TQG-09h	ATBG09H	Indicate the extent to which you agree or disagree with each of the following statements. I have too many administrative tasks	ATBG11H	
TQG-10A	ATBG10A	How many students are in this class?	ATBG12A	
TQG-10B	ATBG10B	How many of the students in #G10A are in <fourth grade="">?</fourth>	ATBG12B	
TQG-11	ATBG11	How many <fourth grade=""> students experience difficulties understanding spoken <language of="" test="">?</language></fourth>	ATBG13	
TQG-12a	ATBG12A	How often do you do the following in teaching this class? Relate the lesson to students' daily lives	ATBG14A	
TQG-12b	ATBG12B	How often do you do the following in teaching this class? Ask students to explain their answers	ATBG14B	
TQG-12c	ATBG12C	How often do you do the following in teaching this class? Bring interesting materials to class	ATBG14C	
TQG-12d	ATBG12D	How often do you do the following in teaching this class? Ask students to complete challenging exercises that require them to go beyond the instruction	ATBG14D	
TQG-12e	ATBG12E	How often do you do the following in teaching this class? Encourage classroom discussions among students	ATBG14E	
TQG-12f	ATBG12F	How often do you do the following in teaching this class? Link new content to students' prior knowledge	ATBG14F	
TQG-12g	ATBG12G	How often do you do the following in teaching this class? Ask students to decide their own problem solving procedures	ATBG14G	
TQG-12h	ATBG12H	How often do you do the following in teaching this class? Encourage students to express their ideas in class	ATBG14H	
TQG-13a	ATBG13A	In your view, to what extent do the following limit how you teach this class? Students lacking prerequisite knowledge or skills	ATBG15A	
TQG-13b	ATBG13B	In your view, to what extent do the following limit how you teach this class? Students suffering from lack of basic nutrition	ATBG15B	
TQG-13c	ATBG13C	In your view, to what extent do the following limit how you teach this class? Students suffering from not enough sleep	ATBG15C	
TQG-13d	ATBG13D	In your view, to what extent do the following limit how you teach this class? Students absent from class		
TQG-13e	ATBG13E	In your view, to what extent do the following limit how you teach this class? Disruptive students	ATBG15D	
TQG-13f	ATBG13F	In your view, to what extent do the following limit how you teach this class? Uninterested students	ATBG15E	
TQG-13g	ATBG13G	In your view, to what extent do the following limit how you teach this class? Students with mental, emotional, or psychological impairment	ATBG15G	Modified wording in 2019
TQG-13h	ATBG13H	In your view, to what extent do the following limit how you teach this class? Students with difficulties understanding the language of instruction		
TQM-01	ATBM01	In a typical week, how much time do you spend teaching mathematics to the students in this class? (minutes)	ATBM01	
TQM-02a	ATBM02A	In teaching mathematics to this class, how often do you ask students to do the following? Listen to me explain new mathematics content	ATBM03A	
TQM-02b	ATBM02B	In teaching mathematics to this class, how often do you ask students to do the following? Listen to me explain how to solve problems	ATBM03B	





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
TQM-02c	ATBM02C	In teaching mathematics to this class, how often do you ask students to do the following? Memorize rules, procedures, and facts	ATBM03C	
TQM-02d	ATBM02D	In teaching mathematics to this class, how often do you ask students to do the following? Practice procedures on their own		
TQM-02e	ATBM02E	In teaching mathematics to this class, how often do you ask students to do the following? Apply what they have learned to new problem situations on their own		
TQM-02f	ATBM02F	In teaching mathematics to this class, how often do you ask students to do the following? Work problems together in the whole class with direct guidance from me	ATBM03E	
TQM-02g	ATBM02G	In teaching mathematics to this class, how often do you ask students to do the following? Work in mixed ability groups	ATBM03H	
TQM-02h	ATBM02H	In teaching mathematics to this class, how often do you ask students to do the following? Work in same ability groups	ATBM03I	
TQM-03	ATBM03	Are the students in this class permitted to use calculators during mathematics lessons?	ATBM04	
TQM-04A	ATBM04A	Do the students in this class have computers (including tablets) available to use during their mathematics lessons?	ATBM05A	
TQM-04Ba	ATBM04BA	What access do the students have to computers? Each student has a computer	ATBM05BA	
TQM-04Bb	ATBM04BB	What access do the students have to computers? The class has computers that students can share	ATBM05BB	
TQM-04Bc	ATBM04BC	What access do the students have to computers? The school has computers that the class can use sometimes	ATBM05BC	
TQM-04Ca	ATBM04CA	How often do you do activities on computers during mathematics lessons to support learning for: Whole class		
TQM-04Cb	ATBM04CB	How often do you do activities on computers during mathematics lessons to support learning for: Low-performing students		
TQM-04Cc	ATBM04CC	How often do you do activities on computers during mathematics lessons to support learning for: High-performing students		
TQM-04Cd	ATBM04CD	How often do you do activities on computers during mathematics lessons to support learning for: Students with special needs		
TQM-05Aa	ATBM05AA	When students in this class have been taught each of the following mathematics topics. Number: Concepts of whole numbers, including place value and ordering	See TQM-06 in 2015 for sub-topics	
TQM-05Ab	ATBM05AB	When students in this class have been taught each of the following mathematics topics. Number: Adding, subtracting, multiplying, and dividing with whole numbers	See TQM-06 in 2015 for sub-topics	
TQM-05Ac	ATBM05AC	When students in this class have been taught each of the following mathematics topics. Number: Concepts of multiples and factors; odd and even numbers	See TQM-06 in 2015 for sub-topics	
TQM-05Ad	ATBM05AD	When students in this class have been taught each of the following mathematics topics. Number: Number sentences (finding the missing number, representing problem situations with number sentences)	See TQM-06 in 2015 for sub-topics	
TQM-05Ae	ATBM05AE	When students in this class have been taught each of the following mathematics topics. Number: Number patterns (extending number patterns and finding missing terms)	See TQM-06	





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

Exhibit 1.4: International Context variables for the Tim55 2019 Teacher Questionnaire			(Si aue 4)	
TIMSS	TIMSS		TIMSS	
2019	2019		2015	
Question	Variable	TIMSS 2019 Variable Description	Variable	Notes
Number	Name		Name	
TQM-05Af	ATBM05AF	When students in this class have been taught each of the following	See TQM-06	
I QIVI-UJAI	ATDIVIOSAL			
		mathematics topics. Number: Concepts of fractions, including representing,		
TO14 054	A TD1 405 A O	comparing and ordering, adding and subtracting simple fractions	sub-topics	
TQM-05Ag	ATBM05AG	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Number: Concepts of decimals, including place value	in 2015 for	
		and ordering, adding and subtracting with decimals	sub-topics	
TQM-05Ba	ATBM05BA	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Measurement and Geometry: Solving problems	in 2015 for	
		involving length, including measuring and estimating	sub-topics	
TQM-05Bb	ATBM05BB	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Measurement and Geometry: Solving problems	in 2015 for	
		involving mass, volume, and time	sub-topics	
TQM-05Bc	ATBM05BC	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Measurement and Geometry: Finding and estimating	in 2015 for	
		perimeter, area, and volume	sub-topics	
TQM-05Bd	ATBM05BD	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Measurement and Geometry: Parallel and	in 2015 for	
		perpendicular lines	sub-topics	
TQM-05Be	ATBM05BE	When students in this class have been taught each of the following	See TQM-06	
. Q.III CODO	TIDMOODE	mathematics topics. Measurement and Geometry: Comparing and drawing	in 2015 for	
		angles	sub-topics	
TQM-05Bf	ATBM05BF	When students in this class have been taught each of the following	See TQM-06	
I QIVI-03DI	ATDIVIOSDI	mathematics topics. Measurement and Geometry: Elementary properties of		
		common geometric shapes	sub-topics	
TOM OFR	ATDMOSDC			
TQM-05Bg	ATBM05BG	When students in this class have been taught each of the following	See TQM-06 in 2015 for	
		mathematics topics. Measurement and Geometry: Three-dimensional		
TOM 050-	ATDMOSOA	shapes, including relationships with their two-dimensional representations	sub-topics	
TQM-05Ca	ATBM05CA	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Data: Reading and interpreting data from tables,	in 2015 for	
		pictographs, bar graphs, line graphs, and pie charts	sub-topics	
TQM-05Cb	ATBM05CB	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Data: Organizing and representing data to help answer		
		questions	sub-topics	
TQM-05Cc	ATBM05CC	When students in this class have been taught each of the following	See TQM-06	
		mathematics topics. Data: Drawing conclusions from data displays	in 2015 for	
TQM-06A	ATBM06A	How often do you usually assign mathematics homework to the students in	ATBM07A	
		this class?		
TQM-06B	ATBM06B	When you assign mathematics homework to the students in this class,	ATBM07B	
		about how many minutes do you usually assign? (Consider the time it		
		would take an average student in your class.)		
TQM-06Ca	ATBM06CA	How often do you do the following with the mathematics homework	ATBM07CA	
		assignments for this class? Correct assignments and give feedback to		
		students		
TQM-06Cb	ATBM06CB	How often do you do the following with the mathematics homework	ATBM07CB	
		assignments for this class? Discuss the homework in class		
TQM-06Cc	ATBM06CC	How often do you do the following with the mathematics homework	ATBM07CC	
		assignments for this class? Monitor whether or not the homework was		
		completed		
		r · · · ·		





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

TIMSS 2019 Question	TIMSS 2019 Variable	TIMSS 2019 Variable Description	TIMSS 2015 Variable	Notes
Number	Name		Name	
TQM-07a	ATBM07A	How much importance do you place on the following assessment strategies in mathematics? Observing students as they work		
TQM-07b	ATBM07B	How much importance do you place on the following assessment strategies		
TQIII OTD	7112111012	in mathematics? Asking students to answer questions during class		
TQM-07c	ATBM07C	How much importance do you place on the following assessment strategies		
		in mathematics? Short, regular written assessments		
TQM-07d	ATBM07D	How much importance do you place on the following assessment strategies		
TOM 07	A TD1407F	in mathematics? Longer tests (e.g., unit tests or exams)		
TQM-07e	ATBM07E	How much importance do you place on the following assessment strategies in mathematics? Long term projects		
TQM-08	ATBM08	in mathematics? Long-term projects About how often do <fourth grade=""> students in this class take mathematics</fourth>		
T QIVI OO	7 (1 DIVIGO	tests on computers or tablets?		
TQM-09Aa	ATBM09AA	In the past two years, have you participated in professional development in	ATBM09A	Modified format in
		any of the following? Mathematics content		2019
TQM-09Ab	ATBM09AB	In the past two years, have you participated in professional development in any of the following? Mathematics pedagogy/instruction	ATBM09B	Modified format in 2019
TQM-09Ac	ATBM09AC	In the past two years, have you participated in professional development in any of the following? Mathematics curriculum	ATBM09C	Modified format in 2019
TQM-09Ad	ATBM09AD	In the past two years, have you participated in professional development in any of the following? Integrating technology into mathematics instruction	ATBM09D	Modified wording and format in 2019
TQM-09Ae	ATBM09AE	In the past two years, have you participated in professional development in any of the following? Improving students' critical thinking or problem solving skills	ATBM09E	Modified format in 2019
TQM-09Af	ATBM09AF	In the past two years, have you participated in professional development in any of the following? Mathematics assessment	ATBM09F	Modified format in 2019
TQM-09Ag	ATBM09AG	In the past two years, have you participated in professional development in any of the following? Addressing individual students' needs	ATBM09G	Modified format in 2019
TQM-09Ba	ATBM09BA	Do you need future professional development in any of the following? Mathematics content		
TQM-09Bb	ATBM09BB	Do you need future professional development in any of the following? Mathematics pedagogy/instruction		
TQM-09Bc	ATBM09BC	Do you need future professional development in any of the following? Mathematics curriculum		
TQM-09Bd	ATBM09BD	Do you need future professional development in any of the following?		
		Integrating technology into mathematics instruction		
TQM-09Be	ATBM09BE	Do you need future professional development in any of the following? Improving students' critical thinking or problem solving skills		
TQM-09Bf	ATBM09BF			
TQM-09Bg	ATBM09BG	Do you need future professional development in any of the following? Addressing individual students' needs		
TQM-10	ATBM10	In the past two years, how many hours in total have you spent in formal <inservice development="" professional=""> for mathematics?</inservice>	ATBM10	
TQS-01A	ATBS01A	Is science taught mainly as a separate subject (i.e., not integrated with other subjects) to the students in this class?	ATBS01A	
TQS-01B	ATBS01B	Please estimate the time that you spend on science topics with students in this class (minutes per week).	ATBS01B	





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
TQS-02a	ATBS02A	In teaching science to the students in this class, how often do you ask them to do the following? Listen to me explain new science content	ATBS03A	
TQS-02b	ATBS02B	In teaching science to the students in this class, how often do you ask them to do the following? Observe natural phenomena such as the weather or a plant growing and describe what they see	ATBS03B	
TQS-02c	ATBS02C	In teaching science to the students in this class, how often do you ask them to do the following? Watch me demonstrate an experiment or investigation	ATBS03C	
TQS-02d	ATBS02D	In teaching science to the students in this class, how often do you ask them to do the following? Design or plan experiments or investigations	ATBS03D	
TQS-02e	ATBS02E	In teaching science to the students in this class, how often do you ask them to do the following? Conduct experiments or investigations	ATBS03E	
TQS-02f	ATBS02F	In teaching science to the students in this class, how often do you ask them to do the following? Present data from experiments or investigations	ATBS03F	
TQS-02g	ATBS02G	In teaching science to the students in this class, how often do you ask them to do the following? Interpret data from experiments or investigations	ATBS03G	
TQS-02h	ATBS02H	In teaching science to the students in this class, how often do you ask them to do the following? Use evidence from experiments or investigations to support conclusions	ATBS03H	
TQS-02i	ATBS02I	In teaching science to the students in this class, how often do you ask them to do the following? Read their textbooks or other resource materials	ATBS03I	
TQS-02j	ATBS02J	In teaching science to the students in this class, how often do you ask them to do the following? Have students memorize facts and principles	ATBS03J	
TQS-02k	ATBS02K	In teaching science to the students in this class, how often do you ask them to do the following? Do field work outside the class	ATBS03K	
TQS-02I	ATBS02L	In teaching science to the students in this class, how often do you ask them to do the following? Work in mixed ability groups	ATBS03M	
TQS-02m	ATBS02M	In teaching science to the students in this class, how often do you ask them to do the following? Work in same ability groups	ATBS03N	
TQS-03A	ATBS03A	Do the students in this class have computers (including tablets) available to use during their science lessons?	ATBS04A	
TQS-03Ba	ATBS03BA	What access do the students have to computers? Each student has a computer	ATBS04BA	
TQS-03Bb	ATBS03BB	What access do the students have to computers? The class has computers that students can share	ATBS04BB	
TQS-03Bc	ATBS03BC	What access do the students have to computers? The school has computers that the class can use sometimes	ATBS04BC	
TQS-03Ca	ATBS03CA	How often do you do activities on computers during science lessons to support learning for: Whole class		
TQS-03Cb	ATBS03CB	How often do you do activities on computers during science lessons to support learning for: Low-performing students		
TQS-03Cc	ATBS03CC	How often do you do activities on computers during science lessons to support learning for: High-performing students		
TQS-03Cd	ATBS03CD	How often do you do activities on computers during science lessons to support learning for: Students with special needs		
TQS-04Aa	ATBS04AA	When students in this class have been taught each of the following science	See TQS-05 in 2015 for sub-topics	





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
TQS-04Ab	ATBS04AB	topics. Life Science: Major body structures and their functions in humans, other animals, and plants	See TQS-05 in 2015 for sub-topics	
TQS-04Ac	ATBS04AC	When students in this class have been taught each of the following science topics. Life Science: Life cycles of common plants and animals (e.g., flowering plants, butterflies, frogs)	See TQS-05 in 2015 for sub-topics	
TQS-04Ad	ATBS04AD	When students in this class have been taught each of the following science topics. Life Science: Characteristics of plants and animals that are inherited		
TQS-04Ae	ATBS04AE	When students in this class have been taught each of the following science topics. Life Science: Interactions between organisms and their environments (e.g., physical features and behaviors that help living things survive in their environments)	See TQS-05 in 2015 for sub-topics	
TQS-04Af	ATBS04AF	When students in this class have been taught each of the following science topics. Life Science: Relationships in ecosystems (e.g., simple food chains, predator-prey relationships, competition)	See TQS-05 in 2015 for sub-topics	
TQS-04Ag	ATBS04AG	When students in this class have been taught each of the following science topics. Life Science: Human health (transmission and prevention of diseases, everyday behaviors that promote good health)	See TQS-05 in 2015 for sub-topics	
TQS-04Ba	ATBS04BA	When students in this class have been taught each of the following science topics. Physical Science: States of matter (solid, liquid, gas) and their properties (volume, shape)		
TQS-04Bb	ATBS04BB	When students in this class have been taught each of the following science topics. Physical Science: Classifying materials based on physical properties (e.g., weight/mass, volume, state of matter, conductivity of heat or electricity)	See TQS-05 in 2015 for sub-topics	
TQS-04Bc	ATBS04BC	When students in this class have been taught each of the following science topics. Physical Science: Mixtures, including methods for separating a mixture into its components (e.g., sifting, filtering, evaporation, using a magnet)	See TQS-05 in 2015 for sub-topics	
TQS-04Bd	ATBS04BD	When students in this class have been taught each of the following science topics. Physical Science: Properties of magnets (e.g., like poles repel and opposite poles attract, magnets can attract some objects)	See TQS-05 in 2015 for sub-topics	
TQS-04Be	ATBS04BE		See TQS-05 in 2015 for sub-topics	
TQS-04Bf	ATBS04BF	When students in this class have been taught each of the following science topics. Physical Science: Chemical changes in everyday life (e.g., decaying, burning, rusting, cooking)	See TQS-05 in 2015 for sub-topics	
TQS-04Bg	ATBS04BG	When students in this class have been taught each of the following science topics. Physical Science: Common sources of energy (e.g., the Sun, wind, oil) and uses of energy (heating and cooling homes, providing light)	See TQS-05 in 2015 for sub-topics	
TQS-04Bh	ATBS04BH	When students in this class have been taught each of the following science topics. Physical Science: Light and sound in everyday life (e.g., shadows and reflections, vibrating objects make sound)	See TQS-05 in 2015 for sub-topics	
TQS-04Bi	ATBS04BI	When students in this class have been taught each of the following science topics. Physical Science: Heat transfer (e.g., energy flows from a hot object to a colder object)		





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

		al Context variables for the Timos 2013 Teacher Questionnaire	(0.000.)	
TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
TQS-04Bj	ATBS04BJ	When students in this class have been taught each of the following science topics. Physical Science: Electricity and simple electrical circuits (e.g., a circuit must be complete to work correctly)	See TQS-05 in 2015 for sub-topics	
TQS-04Bk	ATBS04BK	When students in this class have been taught each of the following science topics. Physical Science: Forces that cause objects to move (e.g., gravity, pushing/pulling) or change their motion (e.g., friction)	See TQS-05 in 2015 for sub-topics	
TQS-04BI	ATBS04BL	When students in this class have been taught each of the following science topics. Physical Science: Simple machines (e.g., levers, pulleys, wheels, ramps) that help make motion easier	See TQS-05 in 2015 for sub-topics	
TQS-04Ca	ATBS04CA		See TQS-05 in 2015 for sub-topics	
TQS-04Cb	ATBS04CB	When students in this class have been taught each of the following science topics. Earth Science: Earth's resources used in everyday life (e.g., water, wind, soil, forests, oil, natural gas, minerals)	See TQS-05 in 2015 for sub-topics	
TQS-04Cc	ATBS04CC	When students in this class have been taught each of the following science topics. Earth Science: Changes in Earth's surface over time (e.g., mountain building, weathering, erosion)	See TQS-05 in 2015 for sub-topics	
TQS-04Cd	ATBS04CD	When students in this class have been taught each of the following science topics. Earth Science: Fossils and what they can tell us about past conditions on Earth	See TQS-05 in 2015 for sub-topics	
TQS-04Ce	ATBS04CE	When students in this class have been taught each of the following science topics. Earth Science: Weather and climate (e.g., daily, seasonal, and locational variations versus long term trends)	See TQS-05 in 2015 for sub-topics	
TQS-04Cf	ATBS04CF	When students in this class have been taught each of the following science topics. Earth Science: Objects in the Solar System (the Sun, the Earth, the Moon, and other planets) and their movements	See TQS-05 in 2015 for sub-topics	
TQS-04Cg	ATBS04CG	When students in this class have been taught each of the following science topics. Earth Science: Earth's motion and related patterns observed on Earth (e.g., day and night, seasons)	See TQS-05 in 2015 for sub-topics	
TQS-05A	ATBS05A	How often do you usually assign science homework to the students in this class?	ATBS06A	
TQS-05B	ATBS05B	When you assign science homework to the students in this class, about how many minutes do you usually assign? (Consider the time it would take an average student in your class.)	ATBS06B	
TQS-05Ca	ATBS05CA	How often do you do the following with the science homework assignments for this class? Correct assignments and give feedback to students	ATBS06CA	
TQS-05Cb	ATBS05CB	How often do you do the following with the science homework assignments for this class? Discuss the homework in class	ATBS06CB	
TQS-05Cc	ATBS05CC	How often do you do the following with the science homework assignments for this class? Monitor whether or not the homework was completed	ATBS06CC	
TQS-06a	ATBS06A	How much importance do you place on the following assessment strategies in science? Observing students as they work		
TQS-06b	ATBS06B	How much importance do you place on the following assessment strategies in science? Asking students to answer questions during class		
TQS-06c	ATBS06C	How much importance do you place on the following assessment strategies in science? Short, regular written assessments		





Exhibit 1.4: International Context Variables for the TIMSS 2019 Teacher Questionnaire (Grade 4)

TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
TQS-06d	ATBS06D	How much importance do you place on the following assessment strategies		
TQS-06e	ATBS06E	in science? Longer tests (e.g., unit tests or exams) How much importance do you place on the following assessment strategies in science? Long-term projects		
TQS-07	ATBS07	About how often do <fourth grade=""> students in this class take science tests on computers or tablets?</fourth>		
TQS-08Aa	ATBS08AA	In the past two years, have you participated in professional development in any of the following? Science content	ATBS08A	Modified format in 2019
TQS-08Ab	ATBS08AB	In the past two years, have you participated in professional development in any of the following? Science pedagogy/instruction	ATBS08B	Modified format in 2019
TQS-08Ac	ATBS08AC	In the past two years, have you participated in professional development in any of the following? Science curriculum	ATBS08C	Modified format in 2019
TQS-08Ad	ATBS08AD	In the past two years, have you participated in professional development in any of the following? Integrating technology into science instruction	ATBS08D	Modified wording and format in 2019
TQS-08Ae	ATBS08AE	In the past two years, have you participated in professional development in any of the following? Improving students' critical thinking or inquiry skills	ATBS08E	Modified format in 2019
TQS-08Af	ATBS08AF	In the past two years, have you participated in professional development in any of the following? Science assessment	ATBS08F	Modified format in 2019
TQS-08Ag	ATBS08AG	In the past two years, have you participated in professional development in any of the following? Addressing individual students' needs	ATBS08G	Modified format in 2019
TQS-08Ah	ATBS08AH	In the past two years, have you participated in professional development in any of the following? Integrating science with other subjects	ATBS08H	Modified format in 2019
TQS-08Ba	ATBS08BA	Do you need future professional development in any of the following? Science content		
TQS-08Bb	ATBS08BB	Do you need future professional development in any of the following? Science pedagogy/instruction		
TQS-08Bc	ATBS08BC	Do you need future professional development in any of the following? Science curriculum		
TQS-08Bd	ATBS08BD	Do you need future professional development in any of the following? Integrating technology into science instruction		
TQS-08Be	ATBS08BE	Do you need future professional development in any of the following? Improving students' critical thinking or inquiry skills		
TQS-08Bf	ATBS08BF	Do you need future professional development in any of the following? Science assessment		
TQS-08Bg	ATBS08BG	Do you need future professional development in any of the following? Addressing individual students' needs		
TQS-08Bh	ATBS08BH	Do you need future professional development in any of the following? Integrating science with other subjects (e.g., mathematics, technology)		
TQS-09	ATBS09	In the past two years, how many hours in total have you spent in formal <in-service development="" professional=""> for science?</in-service>	ATBS09	





Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

Teacher Questionnaire

<Grade 4>

<TIMSS National Research Center Name> <Address>

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



Teacher Ouestionnaire

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 student 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 teachers of <fourth grade> students, and seeks information about teachers' academic and professional backgrounds, classroom resources, instructional practices, and attitudes toward teaching. Since your class has been selected as part of a nationwide sample, your responses are very important in helping to describe primary/elementary education in <country>.

Some of the questions in the questionnaire refer to the "TIMSS class" or "this class." This is the class that is identified on the front of this booklet, and which will be tested as part of TIMSS in your school. If you teach some but not all of the students in the TIMSS class, please think only of the students that you teach when answering these class-specific questions. It is important that you answer each question carefully so that the information that you provide reflects your situation as accurately as possible.

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 <country>. Nevertheless, it is important that you do your best to answer all of the questions so comparisons can be made across countries in the studies.

It is estimated that you will need approximately 35 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 place it in the accompanying envelope and return it to:

<Insert country-specific information here>.

Thank you.

TIMSS 2019





About You

	end of this school year, how many years will	G5 A. During your <post-secondary></post-secondary>	
you ha v TBG01	ve been teaching altogether?	was your <u>major or main</u> area(s)	of study?
	years	Check	Yes
Please ro	und to the nearest whole number.		No
G2		ATBG05AA a) Education—Primary/Elementary	
Are you	ı female or male?	ATBG05AB b) Education—Secondary	
BG02	Check one circle only.	ATBG05AC	
2002	Female (c) MathematicsATBG05AD	0 0
	Male (d) ScienceATBG05AE	
	mulc O	e) <language of="" test=""></language>	
G3		■ ATBG05AF f) 0ther	
How old	d are you?		
ГBG03	Check one circle only.	B. If your major or main area of st	
	Under 25 🔘	education, did you have a <spe< td=""><td>cialization></td></spe<>	cialization>
	25–29 🔘	in any of the following?	
	30–39 🔘	Check	one circle for each line.
	40–49 🔘		Yes No
	50–59 ()	ATBG05BA a) Mathematics	
	60 or more (ATBG05BB b) Science	0 0
ca		ATBG05BC	0 0
G4 What is	the highest level of formed education you	c) Language/reading ATBG05BD	
	the <u>highest</u> level of formal education you empleted?	d) Other subject	
TBG04	Check one circle only.		
Did no	t complete < Upper secondary education—ISCED Level 3> (
<\	Jpper secondary education— ISCED Level 3>		
	(If you have not completed <post-secondary or="" tertiary<br="">education>, go to #G6)</post-secondary>		
<	<post-secondary, non-tertiary<br="">education—ISCED Level 4> (</post-secondary,>		
	<short-cycle tertiary<br="">education—ISCED Level 5> (</short-cycle>		
	<bachelor's equivalent<br="" or="">level—ISCED Level 6></bachelor's>		
	<master's 7="" equivalent="" level="" level—isced="" or=""></master's>		
	<pre><doctor 8="" equivalent="" level="" level—isced="" or=""> </doctor></pre>		





School Emphasis on Academic Success

G6 I

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

Check one circle for each line.

		Very	high			
			High			
				Medi	um	
					Low	
ATBG06A	T					Very low
a) ATBG06B	Teachers' understanding of the school's curricular goals	🔾 –	- 🔾 –	- 🔾 –		
	Teachers' degree of success in implementing the school's curriculum	()	-0-	- O -	-0-	
•	Teachers' expectations for student achievement	()	-0-	- O -	-0-	
·	Teachers' ability to inspire students) -	-0-	- O -	-0-	
,	Parental involvement in school activities	()	-0-	-0-	-0-	
,	Parental commitment to ensure that students are ready to learn	🔾 –	-0-	- () -	-0-	
ATBG06G g) ATBG06H	Parental expectations for student achievement	()	-0-	- O -	-0-	
h) ATBG06I	Parental support for student achievement	()	-0-	-0-	-0-	
i)	Students' desire to do well in school) -	-0-	-0-	-0-	
	Students' ability to reach school's academic goals) -	-0-	- () -	-0-	
	Students' respect for classmates who excel academically	🔾 –	-0-	- () -	-0-	
ATBG06L	Collaboration between school leadership (including master teachers) and teachers to plan instruction————————————————————————————————————	() -	-0-	- () -	-0-	

School Environment

G7 I

Thinking about your current school, indicate the extent to which you agree or disagree with each of the following statements.

Check **one** circle for each line.

	Agree a	lot	
		Agree a li	ittle
			Disagree a little
ATBG07A			Disagree a lot
a) This school is located in			
a safe neighborhood	()—()-(-
ATBG07B	_	_	_
b) I feel safe at this school ATBG07C	()-()-()-()
c) This school's security policies	_		_
and practices are sufficient	() ()-($)-\bigcirc$
d) The students behave in an			
orderly manner	() ()-($)-\bigcirc$
ATBG07E			
e) The students are respectful			
of the teachers	()-(\mathcal{I}	$)-\bigcirc$
ATBG07F			
f) The students respect	\circ		
school property ATBG07G		$\mathcal{I} - \mathcal{I}$	$)-\bigcirc$
g) This school has clear rules			
about student conduct		$\supset -$	\bigcirc
ATBG07H	0 (
h) This school's rules are			
enforced in a fair and	_		
consistent manner	() ()-($)-\bigcirc$

< Grade 4 > Teacher Questionnaire





About Being a Teacher

G8		G9
	How often do you feel the following way about being a teacher?	Indicate the extent to which you agree or disagree with each of the following statements.
	Check one circle for each	line. Check one circle for each line.
	Very often	Agree a lot
	Often	Agree a little
	Sometimes	
		ver or Disagree a lot
TBG08A	a) I am content with my profession as a teacher	ATBG09A a) There are too many students in the classes
TBG08B	b) I find my work full of meaning and purpose	ATBG09B b) I have too much material to cover in class
TBG08C	c) I am enthusiastic about my job	ATBG09C c) I have too many teaching hours
TBG08D	d) My work inspires me	ATBG09D d) I need more time to prepare for class
TBG08E	e) I am proud of the work I do O — O — O	ATBG09E e) I need more time to assist individual students
		ATBG09F f) I feel too much pressure from parents
		ATBG09G g) I have difficulty keeping up with all of the changes to the curriculum
		ATBG09H h) I have too many administrative tasks





About Teaching the TIMSS Class

G10	G12	
A. How many students are in this class?	How often do you do the	e following in teaching this
ATBG10A students Write in the number.	Class:	Check one circle for each line. Every or almost every lesson
B. How many of the students in #G10A are in <fourth grade="">?</fourth>		About half the lessons Some lessons Never
ATBG10B < fourth grade> students Write in the number.	ATBG12A a) Relate the lesson to students' daily lives	-0-0-0
	ATBG12B b) Ask students to explain their answers	-0-0-0
How many <fourth grade=""> students experience</fourth>	ATBG12C c) Bring interesting materials to class	-0-0-0
difficulties understanding spoken <language of="" test="">? ATBG11 students in this class</language>	ATBG12D d) Ask students to complete challenging exercises that require them to go beyond the instruction	-0-0-0
Write in the number.	ATBG12E e) Encourage classroom discussions among students	-0-0-0
	ATBG12F f) Link new content to students' prior knowledge	-0-0-0
	ATBG12G g) Ask students to decide their own problem solving procedures	-0-0-0
	ATBG12H h) Encourage students to express their ideas in class	-0-0-0

< Grade 4 > Teacher Questionnaire





In your view, to what extent do the following limit how you teach this class?

	Check one circle for each line.
	Not at all
	Some
	A lot
ATBG13A	a) Students lacking prerequisite knowledge or skills
ATBG13B	b) Students suffering from lack of basic nutrition
ATBG13C	c) Students suffering from not enough sleep
ATBG13D	d) Students absent from class 🔾 — 🔾
ATBG13E	e) Disruptive students
ATBG13F	f) Uninterested students
ATBG13G	g) Students with mental, emotional, or psychological impairment
ATBG13H	h) Students with difficulties understanding the language of instruction





Teaching Mathematics to the TIMSS Class

M1		M2		
	In a typical week, how much time do you spend teaching mathematics to the students in this cla	ss?	In teaching mathematic you ask students to do	s to this class, how often do the following?
ATBM01	minutes per week Write in the number of minutes per week. Please convert the number of hours into minutes.			Check one circle for each line. Every or almost every lesson About half the lessons Some lessons
		ATBM02A	a) Listen to me explain new mathematics content	O O O
		ATBM02B	b) Listen to me explain how to solve problems	
		ATBM02C	c) Memorize rules, procedures, and facts	0-0-0
		ATBM02D	d) Practice procedures on their own	0-0-0
		ATBM02E	e) Apply what they have learned to new problem situations on their own	
		ATBM02F	f) Work problems together in the whole class with direct guidance from me	e
		ATBM02G	g) Work in mixed ability groups	
		ATBM02H	h) Work in same ability groups	







Using Calculators and Computers for Teaching Mathematics to the TIMSS Class

МЗ		M4	
	Are the students in this class permitted to use calculators during mathematics lessons?	A. Do the stude	nts in this class have computers blets) available to use during their lessons?
ATBM	03 Check one circle only.		
	Yes, with unrestricted use 🔘	ATBM04A	Check one circle only.
	Yes, with restricted use 🔘		Yes O
	No, calculators are not permitted		No (If No, go to #M5)
		If Yes,	
		B. What access	do the students have to computers?
			Check one circle for each line.
			Yes
		ATBM04BA	No
		a) Each student h ATBM04BB	as a computer
		b) The class has c	omputers that students can
		ATBM04BC	0 0
		c) The school has use sometimes	computers that the class can
			o you do activities on computers ematics lessons to support learning
			Check one circle for each line.
			Every or almost every day
			Once or twice a week
			Once or twice a month
		ATRM04CA	Never or almost never
		ATBM04CA a) Whole class	
		ATBM04CB b) Low-performing	ng students () — () — ()
		ATBM04CC	
		c) High-performi students	
		ATBM04CD d) Students with	
		special needs	







Mathematics Topics Taught to the TIMSS Class

M5 **■**

The following list includes the main topics addressed by the TIMSS mathematics test. Choose the response that best describes when the students in this class have been taught each topic. If a topic was in the curriculum before the < fourth grade>, please choose "Mostly taught before this year." If a topic was taught half this year but not yet completed, please choose "Mostly taught this year." If a topic is not in the curriculum, please choose "Not yet taught or just introduced."

Check one circle for each line.

	Mostly taught before this year
	Mostly taught this year
	Not yet taught or just introduced
A. Number	
ATBM05AA a) Concepts of whole numbers, including place value and ordering	
ATBM05AB b) Adding, subtracting, multiplying, and dividing with whole numbers	
ATBM05AC c) Concepts of multiples and factors; odd and even numbers	
ATBM05AD d) Number sentences (finding the missing number, representing problem situations with number sentences)	
ATBM05AE e) Number patterns (extending number patterns and finding missing terms) ————————————————————————————————————	
ATBM05AF f) Concepts of fractions, including representing, comparing and ordering, adding and subtracting simple fractions.	ons
ATBM05AG g) Concepts of decimals, including place value and ordering, adding and subtracting with decimals	
B. Measurement and Geometry	
ATBM05BA a) Solving problems involving length, including measuring and estimating	
ATBM05BB b) Solving problems involving mass, volume, and time	
ATBM05BC c) Finding and estimating perimeter, area, and volume	
ATBM05BD d) Parallel and perpendicular lines	
ATBM05BE e) Comparing and drawing angles	
ATBM05BF f) Elementary properties of common geometric shapes	
ATBM05BG g) Three-dimensional shapes, including relationships with their two-dimensional representations	
C. Data	
ATBM05CA a) Reading and interpreting data from tables, pictographs, bar graphs, line graphs, and pie charts	
ATBM05CB b) Organizing and representing data to help answer questions	
ATBM05CC c) Drawing conclusions from data displays	

< Grade 4 > Teacher Questionnaire





Mathematics Homework for the TIMSS Class

M6		M7	
	usually assign mathematics tudents in this class?		n importance do you place on the assessment strategies in mathematics?
ATBM06A	Check one circle only.		Check one circle for each line.
l do not assign mathem	atics		A Lot
home	work (Co.40 #MZ)		Some
	(Go to #M7)	ATBM07A	None
Less than once a v	_	a) Observing as they wo	rk
1 or 2 times a v	<u>e</u>	ATBM07B h) Asking stud	dents to answer
3 or 4 times a v	_	questions	luring class
Every	y day 🔘	ATBM07C c) Short, regu	lar written
students in this clas do you usually assi	nathematics homework to the ss, about how many minutes gn? (Consider the time it would ident in your class.)	ATBM07D d) Longer test tests or exa	ts
АТВМ06В	Check one circle only.		
15 minutes o	rless 🔘	M8	
16–30 mir	nutes 🔘		v often do <fourth grade=""> students in ake mathematics tests on computers or</fourth>
31–60 mir	nutes 🔘	tablets?	are mathematics tests on computers of
More than 60 mir	nutes 🔘	ATBM08	Check one circle only.
	_		More than once a month
	lo the following with the		Once a month
mathematics home class?	work assignments for this		Twice a year (
	Check one circle for each line.		Once a year (
	Always or almost always		Never ()
	Sometimes		never O
ATBM06CA a) Correct assignments an give feedback to studer ATBM06CB b) Discuss the homework in class	nts 🔾 — 🔾		
ATBM06CC c) Monitor whether or not homework was comple			



Mathematics Assessment of

the TIMSS Class



Professional Development to Teach Mathematics

MA			IVITO	
A	In the past two years, have you participated in professional development in any of the following?	B. Do you need future professional development in any of the following?	have y develo	past two years, how many hours in total you spent in formal <in-service professional<br="">opment> (e.g., workshops, seminars, etc.) othematics?</in-service>
	Check one circle	Check one circle	ATBM10	Check one circle only.
	for each line.	for each line.		None
	Yes	Yes		G
		No No		Less than 6 hours
ATBM09AA	a) Mathematics			6–15 hours 🔘
	content) () — () ATE	BM09BA	16–35 hours ()
ATBM09AB	b) Mathematics pedagogy/			More than 35 hours
	instruction)	BM09BB	More than 55 hours
ATBM09AC	c) Mathematics curriculum 🔾 — 🤇)	ВМ09ВС	
ATBM09AD	d) Integrating technology			
	into mathematics instruction)	DMAGODD	
)	310109BD	
ATBM09AE	· 1 3			
	critical thinking or problem solving skills — (BM09BE	
	problem solving skills — C)	DIVIOSDE	
ATBM09AF	f) Mathematics assessment - O — C)	BM09BF	
ΔΤΡΜΩΔΑ	g) Addressing individual			
AIDIVIOSAG	students' needs)	BM09BG	

< Grade 4> Teacher Questionnaire





Teaching Science to the TIMSS Class

S 1		S2	
А	. Is science taught mainly as a separate subject (i.e., not integrated with other subjects) to the students in this class?		In teaching science to the students in this class, how often do you ask them to do the following?
ATBS0	1 A Check one circle only.		Check one circle for each line.
	Yes ()		Every or almost every lesson About half the lessons
	No ()		Some lessons
	NO ()		Never
В	. Please estimate the time that you spend on science topics with students in this class.	ATBS02A	A a) Listen to me explain new science content
ATBS0		ATBS02B	3 b) Observe natural phenomena
Wri	minutes per week Write in the number of minutes per week. Please convert the number of hours into minutes.		such as the weather or a plant growing and describe what they see
		ATBS02C	c) Watch me demonstrate an experiment or investigation
		ATBS02D	d) Design or plan experiments or investigations
		ATBS02E	e) Conduct experiments or investigations
		ATBS02F	f) Present data from experiments or investigations
		ATBS02G	g g) Interpret data from experiments or investigations
		ATBS02H	h) Use evidence from experiments or investigations to support conclusions
		ATBS02I	i) Read their textbooks or other resource materials
		ATBS02J	j) Have students memorize facts and principles
		ATBS02K	(k) Do field work outside the class —————
		ATBS02L	l) Work in mixed ability groups 🔾 — 🔾 — 🤇
		ATBS02M	n) Work in same ability groups O O O





Using Computers for Teaching Science to the TIMSS Class

S3 **■**

ATBS03A

A. Do the students in this class have computers (including tablets) available to use during their science lessons?

Yes --- 🔘

Check **one** circle only.

computers? le for each line. Yes No — — — — — — — — — — — — —
Yes No
Yes No
No O-O
0-0
$\bigcirc -\bigcirc$
$\bigcirc -\bigcirc$
$\bigcirc -\bigcirc$
every day r twice a week
Once or twice a
month Never or almost never
0-0
$\bigcirc -\bigcirc$
0 0
$\bigcirc -\bigcirc$
0-0

< Grade 4 > Teacher Questionnaire



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Science Topics Taught to the TIMSS Class

S4

The following list includes the main topics addressed by the TIMSS science test. Choose the response that best describes when the students in this class have been taught each topic. If a topic was in the curriculum before the <<u>fourth grade</u>>, please choose "Mostly taught before this year." If a topic was taught half this year but not yet completed, please choose "Mostly taught this year." If a topic is not in the curriculum, please choose "Not yet taught or just introduced."

Mostly taught before this year Mostly taught this year Not yet taught or just introduced A. Life Science ATBSO4AA a) Physical and behavioral characteristics of living things and major groups of living things (e.g., mammals, birds, insects, flowering plants) -ATBSO4AB b) Major body structures and their functions in humans, other animals, and plants -------ATBSO4AE e) Interactions between organisms and their environments (e.g., physical features and behaviors that help living things survive in their environments) ---**B. Physical Science** ATBS04BA a) States of matter (solid, liquid, qas) and their properties (volume, shape)-------ATBSO4BB b) Classifying materials based on physical properties (e.g., weight/mass, volume, state of matter, conductivity of heat or electricity)--ATBSO4BC c) Mixtures, including methods for separating a mixture into its components (e.g., sifting, filtering, evaporation, using a magnet) --ATBSO4BD d) Properties of magnets (e.g., like poles repel and opposite poles attract, magnets can attract some objects) -----ATBSO4BE e) Physical changes in everyday life (e.g., changes of state, dissolving)------ATBSO4BF f) Chemical changes in everyday life (e.g., decaying, burning, rusting, cooking) --------------------ATBSO4BG g) Common sources of energy (e.g., the Sun, wind, oil) and uses of energy (heating and cooling homes, providing light) -ATBS04BI i) Heat transfer (e.g., energy flows from a hot object to a colder object) ------ATBSO4BJ j) Electricity and simple electrical circuits (e.g., a circuit must be complete to work correctly) ------ATBSO4BK k) Forces that cause objects to move (e.g., gravity, pushing/pulling) or change their motion (e.g., friction) ------ATBSO4BL I) Simple machines (e.g., levers, pulleys, wheels, ramps) that help make motion easier -----



Check one circle for each line.



S4 (continued)

Choose the response that best describes when the students in this class have been taught each topic. If a topic was in the curriculum before the <<u>fourth grade</u>>, please choose "Mostly taught before this year." If a topic was taught half this year but not yet completed, please choose "Mostly taught this year." If a topic is not in the curriculum, please choose "Not yet taught or just introduced."

		Check one circle for each line.
		Mostly taught before this year
		Mostly taught this year
		Not yet taught or just introduced
	C. Earth Science	
ATBS04CA	a) Physical makeup of Earth's surface (e.g., land and water in unequal proportions, sources of fresh and salt water)	
ATBS04CB	b) Earth's resources used in everyday life (e.g., water, wind, soil, forests, oil, natural gas, minerals)	
ATBS04CC	c) Changes in Earth's surface over time (e.g., mountain building, weathering, erosion)	
ATBS04CD	d) Fossils and what they can tell us about past conditions on Earth	
ATBS04CE	e) Weather and climate (e.g., daily, seasonal, and locational variations versus long term trends)	
ATBS04CF	f) Objects in the Solar System (the Sun, the Earth, the Moon, and other planets) and their movements	
ATBS04CG	g) Earth's motion and related patterns observed on Earth (e.g., day and night, seasons)	

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< Grade 4 > Teacher Questionnaire



Science Homework for the TIMSS Class

S5 **■**

ATBS05A

A. How often do you usually assign science homework to the students in this class?

Check **one** circle only.

I do not assign science homework Less than once a week 1 or 2 times a week 3 or 4 times a week Every day	(Go to #56)			
B. When you assign science homework to the students in this class, about how many minutes do you usually assign? (Consider the time it would take an average student in your class.)				
ATBS05B	Check one circle only.			
15 minutes or less	\bigcirc			
16–30 minutes	\bigcirc			
31–60 minutes	\bigcirc			
More than 60 minutes	\bigcirc			
C. How often do you do the following with the science homework assignments for this class? Check one circle for each line. Always or almost always				
	Sometimes			
ATROOFOA	Never or almost never			
ATBS05CA a) Correct assignments and give feedback to students (ATBS05CB b) Discuss the homework in class (ATBS05CC c) Monitor whether or not the homework was completed (0-0-0			

Science Assessment of the TIMSS Class

S6

How much importance do you place on the following assessment strategies in science?

		Check one c	ircle for each line.
		A Lot	
		Som	e
ATBS06A			None
	Observing students as they work		- 0
ATBS06B b)	Asking students to answer questions during class		-0
	Short, regular written assessments		-0
d) ATBS06E	Longer tests (e.g., unit tests or exams)		-0
	Long-term projects		-0
s7 -			
3/			

About how often do <fourth grade> students in this class take science tests on computers or tablets?

ATBS07	Check one circle only.
	More than once a month
	Once a month
	Twice a year 🔘
	Once a year 🔘
	Never 🔘





Professional Development to Teach Science

S8			■ S9	
A.	In the past two years, have you participated in professional development in any of the following?	B. Do you need future professiona development in an of the following?	l y	In the past two years, how many hours in total have you spent in formal <in-service development="" professional=""> (e.g., workshops, seminars, etc.) for science?</in-service>
	Check one circle for each line.	Check one circle for each line.	ATB	Check one circle only.
	Yes	Yes No No	_	None C Less than 6 hours C
ATBS08AA	a) Science content)O	ATBS08BA	6–15 hours () A 16–35 hours ()
ATBS08AB	b) Science pedagogy/ instruction)	ATBS08BE	More than 35 hours
ATBS08AC	c) Science curriculum — ()	ATBS08BC	
ATBS08AD	d) Integrating technology into science instruction ()	ATBS08BD	
ATBS08AE	e) Improving students' critical thinking or inquiry skills)	ATBS08BE	≣
ATBS08AF	f) Science assessment ()	ATBS08BF	=
ATBS08AG	g) Addressing individual students' needs)	ATBS08BG	a
ATBS08AH	h) Integrating science with other subjects (e.g., mathematics, technology))	ATBS08BF	1

Thank You

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

< Grade 4> Teacher Questionnaire







timss.bc.edu

<Grade 4>



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for the Evaluation of



SECTION 1.5: SCHOOL QUESTIONNAIRE 1011001 GRADE 4

TIMSS 2019 USER GUIDE FOR THE INTERNATIONAL DATABASE



Exhibit 1.5: International Context Variables for the TIMSS 2019 School Questionnaire (Grade 4)

TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
ScQ-01	ACBG01	What is the total enrollment of students in your school as of <first 2019="" begins,="" day="" month="" of="" testing="" timss="">?</first>	ACBG01	
ScQ-02	ASBG02	What is the total enrollment of <fourth grade=""> students in your school as of <first 2019="" begins,="" day="" month="" of="" testing="" timss="">?</first></fourth>	ASBG02	
ScQ-03a	ACBG03A	Approximately what percentage of students in your school have the following backgrounds? Come from economically disadvantaged homes	ACBG03A	
ScQ-03b	ACBG03B	Approximately what percentage of students in your school have the following backgrounds? Come from economically affluent homes	ACBG03B	
ScQ-04	ACBG04	Approximately what percentage of students in your school have <language< a=""> of test> as their native language?</language<>	ACBG04	
ScQ-05A	ACBG05A	How many people live in the city, town, or area where your school is located?	ACBG05A	
ScQ-05B	ACBG05B	Which best describes the immediate area in which your school is located?	ACBG05B	
ScQ-06A	ACBG06A	For the <fourth grade=""> students in your school: How many days per year is your school open for instruction?</fourth>	ACBG08A	
ScQ-06B	ACBG06B	For the <fourth grade=""> students in your school: What is the total instructional time, excluding breaks, in a typical day? (minutes)</fourth>	ACBG08B	
ScQ-06C	ACBG06C	For the <fourth grade=""> students in your school: In one calendar week, how many days is the school open for instruction?</fourth>	ACBG08C	
ScQ-07	ACBG07	How many computers (including tablets) does your school have for use by <fourth grade=""> students?</fourth>	ACBG11	
ScQ-08A	ACBG08A	Does your school have a science laboratory that can be used by <fourth grade=""> students?</fourth>	ACBG12A	
ScQ-08B	ACBG08B	Do teachers usually have assistance available when students are conducting science experiments?	ACBG12B	
ScQ-09	ACBG09	Does your school use an online learning management system to support learning (e.g., teacher-student communication, management of grades, student access to course materials)?		
ScQ-10A	ACBG10A	Does your school have a school library?	ACBG13	
ScQ-10B	ACBG10B	Approximately how many books (print) with different titles does your school library have (exclude magazines and periodicals)?	ACBG13AA	Modified wording and response options in 2019
ScQ-11	ACBG11	Does your school have classroom libraries?		
ScQ-12	ACBG12	Does your school provide students access to digital learning resources (e.g., books, videos)?		
ScQ-13Aa	ACBG13AA	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? General School Resources: Instructional materials	ACBG14AA	
ScQ-13Ab	ACBG13AB	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? General School Resources: Supplies	ACBG14AB	
ScQ-13Ac	ACBG13AC	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? General School Resources: School buildings and grounds	ACBG14AC	
ScQ-13Ad	ACBG13AD	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? General School Resources: Heating/cooling and lighting systems	ACBG14AD	





Exhibit 1.5: International Context Variables for the TIMSS 2019 School Questionnaire (Grade 4)

	ACBG14CA	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? Resources for Science Instruction: Teachers with a specialization in science How much is your school's capacity to provide instruction affected by a		ScQ-13Ca
		shortage or inadequacy of the following? Resources for Mathematics Instruction: Concrete objects or materials to help students understand quantities or procedures		
	ACBG14BE	Instruction: Calculators for mathematics instruction How much is your school's capacity to provide instruction affected by a	ACBG13BE	ScQ-13Be
		shortage or inadequacy of the following? Resources for Mathematics		
	ACBG14BD	How much is your school's capacity to provide instruction affected by a	ACBG13BD	ScQ-13Bd
	∀CB€14BC	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? Resources for Mathematics Instruction.	ACBG13BC	2cG-13Bc
	Jarragov	Instruction: Computer software/applications for mathematics instruction	00010001	-40,0-9
	ACBG14BB	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? Resources for Mathematics	ACBG13BB	2cG-13BP
	VCBC14BV	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? Resources for Mathematics Instruction: Teachers with a specialization in mathematics	ACBG13BA	ScQ-13Ba
		Resources for students with disabilities		
	∀CBC1¢∀I	shortage or inadequacy of the following? General School Resources: Computer technology for teaching and learning How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? General School Resources:	ACBG13AI	ScQ-13Ai
	ACBG14AH	How much is your school's capacity to provide instruction affected by a shortest on inside instruction affected by a	ACBG13AH	ScQ-13Ah
		shortage or inadequacy of the following? General School Resources: Audiovisual resources for delivery of instruction		
	ACBG14AG	How much is your school's capacity to provide instruction affected by a	ACBG13AG	ScQ-13Ag
	ACBG14AF	How much is your school's capacity to provide instruction affected by a shortage or inadequacy of the following? General School Resources: Technologically competent staff	ACBG13AF	3AE1-Doe
		Instructional space		
	7.//	abortage or inadequacy of the following? General School Resources:	7) (0) 0.50; :	0.401 200
	ACBG14AE	How much is your school's capacity to provide instruction affected by a	Name ACBG13AE	Number ScQ-13Ae
sətoN	TIMSS 2015 Variable	TIMSS 2019 Variable Description	SMIT 2019 Variable	TIMSS 2019 Question



Exhibit 1.5: International Context Variables for the TIMSS 2019 School Questionnaire (Grade 4)

TIMSS 2019	TIMSS 2019		TIMSS 2015	
Question Number	Variable Name	TIMSS 2019 Variable Description	Variable Name	Notes
ScQ-14c	ACBG14C	How would you characterize each of the following within your school? Teachers' expectations for student achievement	ACBG15C	
ScQ-14d	ACBG14D	How would you characterize each of the following within your school? Teachers' ability to inspire students	ACBG15E	
ScQ-14e	ACBG14E	How would you characterize each of the following within your school? Parental involvement in school activities	ACBG15F	
ScQ-14f	ACBG14F	How would you characterize each of the following within your school? Parental commitment to ensure that students are ready to learn	ACBG15G	
ScQ-14g	ACBG14G	How would you characterize each of the following within your school? Parental expectations for student achievement	ACBG15H	
ScQ-14h	ACBG14H	How would you characterize each of the following within your school? Parental support for student achievement	ACBG15I	
ScQ-14i	ACBG14I	How would you characterize each of the following within your school? Students' desire to do well in school	ACBG15K	
ScQ-14j	ACBG14J	How would you characterize each of the following within your school? Students' ability to reach school's academic goals	ACBG15L	
ScQ-14k	ACBG14K	How would you characterize each of the following within your school? Students' respect for classmates who excel academically	ACBG15M	Modified wording in 2019
ScQ-15a	ACBG15A	To what degree is each of the following a problem among <fourth grade=""> students in your school? Arriving late at school</fourth>	ACBG16A	
ScQ-15b	ACBG15B	To what degree is each of the following a problem among <fourth grade=""> students in your school? Absenteeism</fourth>	ACBG16B	
ScQ-15c	ACBG15C	To what degree is each of the following a problem among <fourth grade=""> students in your school? Classroom disturbance</fourth>	ACBG16C	
ScQ-15d	ACBG15D	To what degree is each of the following a problem among <fourth grade=""> students in your school? Cheating</fourth>	ACBG16D	
ScQ-15e	ACBG15E	To what degree is each of the following a problem among <fourth grade=""> students in your school? Profanity</fourth>	ACBG16E	
ScQ-15f	ACBG15F	To what degree is each of the following a problem among <fourth grade=""> students in your school? Vandalism</fourth>	ACBG16F	
ScQ-15g	ACBG15G	To what degree is each of the following a problem among <fourth grade=""> students in your school? Theft</fourth>	ACBG16G	
ScQ-15h	ACBG15H	To what degree is each of the following a problem among <fourth grade=""> students in your school? Intimidation or verbal abuse among students</fourth>	ACBG16H	
ScQ-15i	ACBG15I	To what degree is each of the following a problem among <fourth grade=""> students in your school? Physical fights among students</fourth>	ACBG16I	
ScQ-15j	ACBG15J	To what degree is each of the following a problem among <fourth grade=""> students in your school? Intimidation or verbal abuse of teachers or staff</fourth>	ACBG16J	
ScQ-16a	ACBG16A	To what degree is each of the following a problem among teachers in your school? Arriving late or leaving early	ACBG17A	
ScQ-16b	ACBG16B	To what degree is each of the following a problem among teachers in your school? Absenteeism	ACBG17B	
ScQ-17a	ACBG17A	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Recognize most of the letters of the alphabet</first>	ACBG18A	
ScQ-17b	ACBG17B	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Read some words</first>	ACBG18B	





Exhibit 1.5: International Context Variables for the TIMSS 2019 School Questionnaire (Grade 4)

TIMSS 2019 Question Number	TIMSS 2019 Variable Name	TIMSS 2019 Variable Description	TIMSS 2015 Variable Name	Notes
ScQ-17c	ACBG17C	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Read sentences</first>	ACBG18C	
ScQ-17d	ACBG17D	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Write letters of the alphabet</first>	ACBG18D	
ScQ-17e	ACBG17E	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Write their names</first>		
ScQ-17f	ACBG17F	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Write words other than their names</first>		
ScQ-17g	ACBG17G	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Count up to 100 or higher</first>	ACBG18F	
ScQ-17h	ACBG17H	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Recognize written numbers from 1-10</first>	ACBG18G	
ScQ-17i	ACBG17I	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Recognize written numbers higher than 10</first>	ACBG18H	
ScQ-17j	ACBG17J	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Write numbers from 1-10</first>	ACBG18I	
ScQ-17k	ACBG17K	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Do simple addition</first>	ACBG18J	
ScQ-17I	ACBG17L	About how many of the students in your school can do the following when they begin the <first grade=""> of primary/elementary school? Do simple subtraction</first>	ACBG18K	
ScQ-18	ACBG18	By the end of this school year, how many years will you have been a principal altogether?	ACBG19	
ScQ-19	ACBG19	By the end of this school year, how many years will you have been a principal at this school?	ACBG20	
ScQ-20	ACBG20	What is the highest level of formal education you have completed?	ACBG21	
ScQ-21a	ACBG21A	Do you hold the following qualifications or credentials in educational leadership? <certificate license="" or=""></certificate>	<u> </u>	
ScQ-21b	ACBG21B	Do you hold the following qualifications or credentials in educational leadership? <master's 7="" equivalent="" level="" level—isced="" or=""></master's>	ACBG22A	Modified wording in 2019
ScQ-21c	ACBG21C	Do you hold the following qualifications or credentials in educational leadership? < Doctor or equivalent level—ISCED Level 8>	ACBG22B	Modified wording in 2019





Identification Label

TRENDS IN INTERNATIONAL MATHEMATICS AND SCIENCE STUDY

School Questionnaire

<Grade 4>

<TIMSS National Research Center Name>
<Address>

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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 student 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 primary/elementary education in <country>.

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 <country>. 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 place it in the accompanying envelope and return it to:

<Insert country-specific information here>.

Thank you.

TIMSS 2019





School Enrollment and Characteristics

ACBG01 1	1	_ 5		
NODGOT 1	What is the total enrollment of students in your school as of <first day="" month="" of="" testing<="" th="" timss=""><th>A. How many people live in the city, town, or area where your school is located?</th></first>	A. How many people live in the city, town, or area where your school is located?		
	begins, 2019>?	ACBG05A Check one circle only.		
	students	More than 500,000 people		
	Write in the number.	100,001 to 500,000 people		
		50,001 to 100,000 people		
ACBG02	2	30,001 to 50,000 people		
	What is the total enrollment of < <u>fourth grade</u> >	15,001 to 30,000 people		
	students in your school as of <first 2019="" begins,="" day="" month="" of="" testing="" timss="">?</first>	3,001 to 15,000 people		
		3,000 people or fewer		
	students Write in the number.			
	write in the number.	B. Which best describes the immediate area in whic your school is located?		
3		ACBG05B Check one circle only.		
	Approximately what percentage of students in yo school have the following backgrounds?	Urban—Densely populated		
	Check one circle for each line.	Suburban—On fringe or outskirts of urban area		
	0 to 10%	Medium size city or large town		
	11 to 25% 26 to 50%	Small town or village (
	More th: 50%	Remote rural (
ACBG03A	a) Come from economically disadvantaged homes			
ACBG03B	b) Come from economically affluent homes			
ACBG04		_		
	Approximately what percentage of students in your school have <language of="" test=""> as their national language?</language>	<i>r</i> e		
	Check one circle only.			
	More than 90%			
	76 to 90%			
	51 to 75%			
	26 to 50%			
	25% or less ()			





Instructional Time

	6
	For the <fourth grade=""> students in your school:</fourth>
ACBG06A	A. How many <u>days per year</u> is your school open for instruction?
	Write in the number.
ACBG06B	B. What is the <u>total instructional time</u> , excluding breaks, in a <u>typical day</u> ?
	minutes Write in the number of minutes per day. Please convert the number of hours into minutes.
ACBG06C	C. In one <u>calendar week</u> , how many days is the school open for instruction?
	Check one circle only.
	6 days 🔘
	5 1/2 days 🔘
	5 days 🔘
	4 1/2 days 🔘
	4 days 🔘
	Other 🔘

< Grade 4> School Questionnaire





Resources and Technology

ACBG07	7	10		
	How many computers (including tablets) does your school have for use by <fourth grade=""> students? computers Write in the number.</fourth>	A. Does your school have a school library? ACBG10A Check one circle only. Yes No (If No, go to #11)		
ACBG08A	A. Does your school have a science laboratory that can be used by <fourth grade=""> students? Check one circle only. Yes \(\) No \(\)</fourth>	If Yes, B. Approximately how many books (print) with different titles does your school library have (exclude magazines and periodicals)? ACBG10B Check one circle only. 2,000 books or fewer More than 2,000 books		
	Students are conducting science experiments? Check one circle only. Yes No	Does your school have classroom libraries? ACBG11 Check one circle only.		
ACBG09	Does your school use an online learning management system to support learning (e.g., teacher-student communication, management of grades, student access to course materials)? Check one circle only. Yes No	Yes \(\) No \(\) Does your school provide students access to digital learning resources (e.g., books, videos)? ACBG12 \(Check \text{ one circle only.} \) Yes \(\)		
		No (





13 -

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

		Check one circle for each line.		Che	ck one circle for each line.
		Not at all		No	t at all
		A little			A little
		Some			Some
		A lot			A lot
	A. General School Resources			B. Resources for Mathematics Instruction	
ACBG13AA	a) Instructional materials (e.g., textbooks)	-0-0-0	ACBG13BA	a) Teachers with a specialization in mathematics	
ACBG13AB	b) Supplies (e.g., papers, pencils, materials)	-0-0-0	ACBG13BB	b) Computer software/	
ACBG13AC	c) School buildings and grounds	-0-0-0		applications for mathematics instruction	-0-0-0
ACBG13AD	d) Heating/cooling and lighting systems	-0-0-0	ACBG13BC	c) Library resources relevant to mathematics instruction	-0-0-0
ACBG13AE	e) Instructional space (e.g., classrooms)		ACBG13BD	d) Calculators for mathematics instruction	-0-0-0
ACBG13AF	f) Technologically competent staff		ACBG13BE	e) Concrete objects or materials to help students understand quantities or procedures	-0-0-0
ACBG13AG	g) Audio-visual resources for delivery of instruction (e.q., interactive white			C. Resources for Science Instruction	
AODO40AU	boards, digital projectors)	-0-0-0	ACBG13CA	a) Teachers with a specialization in science	-0-0-0
ACBG13AH	h) Computer technology for teaching and learning (e.g., computers or tablets for student use)		ACBG13CB	b) Computer software/ applications for science instruction	-0-0-0
ACBG13AI	i) Resources for students with disabilities	-0-0-0	ACBG13CC	c) Library resources relevant to science instruction	-0-0-0
			ACBG13CD	d) Science equipment and materials for experiments	-0-0-0

5 < Grade 4> School Questionnaire





School Emphasis on Academic Success

School Discipline and Safety

To what degree is each of the following a problem

Check one circle for each line.

among <fourth grade> students in your school?

15 ı

14 .

ACBG14A a) Teachers' understanding of

ACBG14B b) Teachers' degree of

the school's curricular goals ---

success in implementing

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

Very high

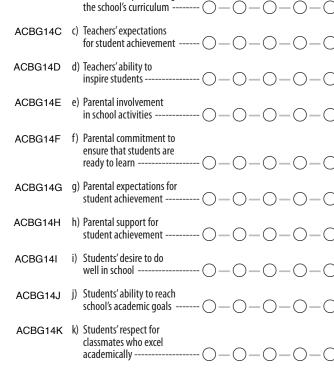
Check one circle for each line.

Medium

Low

High

			Not a pr	oblem	
				Minor pro	blem
					Moderate problem
					Serious problem
y	ACBG15A	Arriving late at school	-	7_7	
<u> </u>	ACBG15B	_	O-0		
	b)	Absenteeism (i.e., unjustified absences)	\bigcirc	\supset _C)
	ACBG15C	•	_		
	-	Classroom disturbance	\bigcirc -()-($)-\bigcirc$
	ACBG15D d)	Cheating	\bigcirc -(-	-
	ACBG15E	Profanity	\bigcirc	\supset _C)
	ACRG15E	•			, ,
	-	Vandalism	\bigcirc -(\mathcal{I}	$)-\bigcirc$
	ACBG15G g)	Theft	\bigcirc -(\sim	$)-\bigcirc$
	ACBG15H	Intimidation or verbal abuse			
	11)	among students (including	_		
	ACBG15I	texting, emailing, etc.)	\bigcirc)-($)-\bigcirc$
		Physical fights among	_	_	_
	ACBG15J	students	\bigcirc -()-($)-\bigcirc$
		Intimidation or verbal abuse			
	,,	of teachers or staff (including			
		texting, emailing, etc.)	$\bigcirc -($	\mathcal{I}	$)-\bigcirc$
	16 🕳				
	To	what degree is each o	f the fo	llowing	g a problem
	aı	mong teachers in your	school?		
			Check o	ne circle	for each line.
			Not a pr	oblem	
			•	Minor pro	blem
					Moderate problem
					Serious





ACBG16A a) Arriving late or leaving early -- O -- O -- ACBG16B b) Absenteeism ------



School Readiness

17 -

About how many of the students in your school can do the following when they begin the <first grade> of primary/elementary school?

Check one circle for each line.

		Less than 25%
		25-50%
		51–75%
		More than 75%
ACBG17A	a) Recognize most of the letters of the alphabet	
ACBG17B	b) Read some words	
ACBG17C	c) Read sentences	
ACBG17D	d) Write letters of the alphabet	
ACBG17E	e) Write their names	
ACBG17F	f) Write words other than their names	
ACBG17G	g) Count up to 100 or higher	
ACBG17H	h) Recognize written numbers from 1-10	-0-0-0
ACBG17I	i) Recognize written numbers higher than 10	
ACBG17J	j) Write numbers from 1-10	
ACBG17K	k) Do simple addition	
ACBG17L	Do simple subtraction	-0-0-0

Principal Experience and Education

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

ACBG18

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

19₁

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

ACBG19

_ years Please round to the nearest whole number.

20 -

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

ACBG20

Check one circle only.

Did not complete <Bachelor's or equivalent level—ISCED Level 6> ---

<Bachelor's or equivalent level—ISCED Level 6> ---

<Master's or equivalent level—ISCED Level 7> ---

< Doctor or equivalent level—ISCED Level 8> ---

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

Check one circle for each line.

		Yes
		No
ACBG21A	a) <certificate license="" or=""></certificate>	-0-0
ACBG21B	b) <master's 7="" equivalent="" level="" level—isced="" or=""></master's>	-0-0
ACBG21C	c) < Doctor or equivalent level—ISCED Level 8>	-0-0

<Grade 4> School Questionnaire



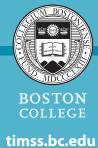


Thank You

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







<Grade 4>



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