

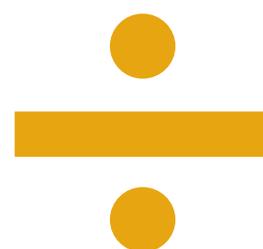


TEDS-M

TEDS-M 2008 User Guide for the International Database

Supplement ②

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ISBN/EAN: 978-90-79549-11-5

Publisher: the IEA Secretariat

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The International Association for the Evaluation of Educational Achievement, known as IEA, is an independent, international consortium of national research institutions and government research agencies, with headquarters in Amsterdam. Its primary purpose is to conduct large-scale comparative studies of educational achievement with the aim of gaining more in-depth understanding of the effects of policies and practices within and across systems of education.

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SUPPLEMENT 2:

National Adaptations of the TEDS-M Questionnaires

Overview

This supplement contains all adaptations made by countries to the international version of the TEDS-M questionnaires under careful supervision of and approval by the TEDS-M International Study Center at Michigan State University. This information provides users of the TEDS-M International Database with a guide to evaluate the availability of internationally comparable data for use in secondary analyses.

The adaptations to questionnaires are presented in four sections:

- Section 1: Institutional Program Questionnaire
- Section 2: Educator Questionnaire
- Section 3: Future Teacher Questionnaire (Parts A, B, and D)
- Section 4: Adaptations to questions about education levels (ISCED classification)

Each section contains adaptations specific to individual education systems followed by general or common cultural adaptations and variables. The listed adaptations include questions that countries were required to adapt, questions that were not administered, and questions that countries modified to suit their national context.

For each question that was modified from the international version, an entry is included in the appendix.

The information for each question includes:

- International question number
- International question stem and response options
- International variable name(s)
- National adaptation, listed by country.

All listed adaptations have one of two different codes assigned to them:

Code D: National data are included in the international database. This code is used for questions where the specific national version was considered appropriate for comparison.

Code X: National data are not included in the international database. This code is used to refer to a few questions that were not administered, not applicable, or deleted for any of several reasons (e.g., not internationally comparable, removed because of NRC request, or removed due to other data problems).

In Section 3 only adaptations to parts A, B, and D of the future primary teacher questionnaire are displayed as they are identical to adaptations made to the same parts of the future secondary teacher questionnaire. Adaptations made by Oman, which surveyed only future secondary teachers, are also listed below as are adaptations made by Spain, which surveyed only future primary teachers.

Section 1 – TEDS-M 2008 Institutional Program Questionnaire

IN-A-01

Question:

This program prepares <future teachers> to teach in
 1 = <Primary> schools only
 2 = <Secondary> schools only
 3 = Both <primary> and <secondary> schools

Variable Name(s): MIA001

Country	Item ID	Code	Documentation
POLAND	IN-A-01	D	Nationally defined categories: 1 = Primary schools only 2 = Secondary schools only 3 = Both primary and upper and lower secondary schools

IN-A-02

Question:

The structure of this program is best described as
 1 = Concurrent
 2 = Consecutive
 3 = Apprenticeship

Variable Name(s): MIA002

Country	Item ID	Code	Documentation
GERMANY	IN-A-02	D	Gang punched to "Consecutive"
NORWAY	IN-A-02	D	National categories recoded to fit international categories: 1 = Concurrent 2 = Consecutive 3 = Category not administered or data not available
RUSSIAN FEDERATION	IN-A-02	D	Gang punched to "Concurrent"

IN-A-03A-B

Question:

How many years and months does it take for a typical <future teacher> to complete this concurrent program?
 A. Years and
 B. Months

Variable Name(s): MIA003A, MIA003B

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-A-03A-03B	D	Stem of the question changed: How many years and months does it take for a typical pre-service teacher to complete this program (including practicum)
GERMANY	IN-A-03A-03B	X	Question not administered or data not available

IN-A-04AT-B**Question:**

What credential is earned in this concurrent program? Please also enter ISCED level, using the chart at the beginning of this questionnaire.

A. Name of credential in language of country

B. ISCED level

Variable Name(s): MIA004AT, MIA004B

Country	Item ID	Code	Documentation
GERMANY	IN-A-04AT-04B	X	Question not administered or data not available
POLAND	IN-A-04AT	D	Stem of the question changed: What are the qualifications earned by teaching specialty students after completion of these studies? Please enter the name of obtained professional title and level of education (such as 1st degree studies, 2nd degree studies, one-cycle Master)
POLAND	IN-A-04B	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = ISCED LEVEL 5B (KOLEGIUM) 3 = ISCED LEVEL 5A 1ST DEGREE 4 = ISCED LEVEL 5A 2ND DEGREE / ISCED LEVEL 5A (5YEARS) 5 = Category not administered or data not available

IN-A-05A-B**Question:**

How many years and months does it take for a typical <future teacher> to complete the academic or subject-matter preparation of this consecutive program?

A. Years and

B. Months

Variable Name(s): MIA005A, MIA005B

Country	Item ID	Code	Documentation
GERMANY	IN-A-05A-05B	D	Stem of the question changed: How many years and months is the regular period of study for the first phase (academic studies) of the program?
POLAND	IN-A-05A-05B	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-05A-05B	X	Question not administered or data not available

IN-A-06**Question:**

Does this academic or subject-matter preparation take place in your institution?

Check one box.

1 = Yes, for all <future teachers> in the program

2 = Yes, for most <future teachers> in the program

3 = Yes, for a minority of <future teachers> in the program

4 = No

Variable Name(s): MIA006

Country	Item ID	Code	Documentation
GERMANY	IN-A-06	D	Stem of the question changed: Does this first phase (academic study) take place in your state?
POLAND	IN-A-06	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-06	X	Question not administered or data not available

IN-A-07A-B**Question:**

How many years and months does it take for a typical <future teacher> to complete the <pedagogical> and professional studies (including practical experience) of this consecutive program?

A. Years and

B. Months

Variable Name(s): MIA007A, MIA007B

Country	Item ID	Code	Documentation
GERMANY	IN-A-07A-07B	D	Stem of the question changed: How many years and months does the second phase (practical training) take in your state?
POLAND	IN-A-07A-07B	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-07A	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-07B	X	Question not administered or data not available

IN-A-08AT-B**Question:**

What credential is earned at the end of the <pedagogical> and professional studies (including practical experience) of this consecutive program? Please also enter ISCED level, using the chart at the beginning of this questionnaire.

- A. Name of credential in language of country
B. ISCED level

Variable Name(s): MIA008AT, MIA008B

Country	Item ID	Code	Documentation
GERMANY	IN-A-08AT-08B	D	Stem of the question changed: Which certification is earned with the successful completion of the practical training? Please also enter ISCED level, using the chart at the beginning of this questionnaire.
POLAND	IN-A-08AT	X	Question not administered or data not available
POLAND	IN-A-08B	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-08AT-08B	X	Question not administered or data not available

IN-A-09A-B**Question:**

How many years and months does it take for a typical <future teacher> to complete this apprenticeship program?

- A. Years and
B. Months

Variable Name(s): MIA009A, MIA009B

Country	Item ID	Code	Documentation
CHILE	IN-A-09A-09B	X	Question not administered or data not available
GERMANY	IN-A-09A-09B	X	Question not administered or data not available
NORWAY	IN-A-09A-09B	X	Question not administered or data not available
POLAND	IN-A-09A-09B	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-09A-09B	X	Question not administered or data not available

IN-A-10**Question:**

Is your training institution (other than the <primary> or <secondary> school in which the practical experience takes place) responsible for coordinating the learning program for <future teachers> during this apprenticeship program?

1 = Yes

2 = No

Variable Name(s): MIA010

Country	Item ID	Code	Documentation
CHILE	IN-A-10	X	Question not administered or data not available
GEORGIA	IN-A-10	D	Basic
GERMANY	IN-A-10	X	Question not administered or data not available
NORWAY	IN-A-10	X	Question not administered or data not available
POLAND	IN-A-10	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-10	X	Question not administered or data not available

IN-A-11**Question:**

If you selected 'No', please explain who is responsible for the practical experience.

Variable Name(s): MIA011T

Country	Item ID	Code	Documentation
CHILE	IN-A-11	X	Question not administered or data not available
GERMANY	IN-A-11	X	Question not administered or data not available
NORWAY	IN-A-11	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-11	X	Question not administered or data not available

IN-A-12AT-B**Question:**

What credential is earned in this apprenticeship program? Please also enter ISCED level, using the chart at the beginning of this questionnaire.

A. Name of credential in language of country

B. ISCED level

Variable Name(s): MIA012AT, MIA012B

Country	Item ID	Code	Documentation
CHILE	IN-A-12AT-12B	X	Question not administered or data not available
GERMANY	IN-A-12AT-12B	X	Question not administered or data not available
NORWAY	IN-A-12AT-12B	X	Question not administered or data not available
POLAND	IN-A-12AT	X	Question not administered or data not available
POLAND	IN-A-12B	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-A-12AT-12B	X	Question not administered or data not available

IN-B-01A-B**Question:**

a) What is the minimum level of mathematics that these <future teachers> are required to have completed in <secondary> school?

- 1 = <Year 12> (Advanced level)
- 2 = <Year 12>
- 3 = <Year 11>
- 4 = <Year 10>
- 5 = Below <Year 10>
- 6 = No minimum level of mathematics is required

b) What is the most advanced mathematics <course> that <future teachers> in this program are required to have completed in <secondary> school?

- 1 = <Country specific>
- 2 = <Country specific>
- 3 = <Country specific>
- 4 = <Country specific>
- 5 = <Country specific>
- 6 = <Country specific>
- 7 = <Country specific>
- 8 = <Country specific>
- 9 = Don't know

Variable Name(s): MIB001A, MIB001B

Country	Item ID	Code	Documentation
BOTSWANA	IN-B-01A	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = Form 5 3 = Form 4 4 = Form 3 5 = Below Form 3 6 = No minimum level of mathematics is required
BOTSWANA	IN-B-01B	D	National categories recoded to fit international categories: 1 = Additional mathematics 2 = O level mathematics 3 = A level mathematics 4 = Higher grade mathematics 5 = Category not administered or data not available 6 = Category not administered or data not available 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
CANADA	IN-B-01A	D	Nationally defined categories: 1 = Grade 12 (secondary 5) (advanced level) 2 = Grade 12 (secondary 5) 3 = Grade 11 (secondary 4) 4 = Grade 10 (secondary 3) 5 = Below grade 10 (secondary 3) 6 = No minimum level of mathematics is required

Country	Item ID	Code	Documentation
CANADA	IN-B-01B	D	National categories recoded to fit international categories: 1 = Pre-calculus 2 = Applied mathematics 3 = Consumer mathematics 4 = General mathematics 5 = Category not administered or data not available 6 = Category not administered or data not available 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
CHILE	IN-B-01A	D	Nationally defined categories: 1 = Fourth Middle (Advanced level) 2 = Fourth Middle 3 = Third Middle 4 = Second Middle 5 = Below Second Middle 6 = No minimum level of mathematics is required
CHILE	IN-B-01B	D	National categories recoded to fit international categories: 1 = Infinite processes 2 = Geometrical places: conics 3 = Linear programming 4 = Logarithmic and exponential functions 5 = Category not administered or data not available 6 = Category not administered or data not available 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
CHINESE TAIPEI	IN-B-01A	D	National categories recoded to fit international categories: 1 = Year 12 mathematics for science group A 2 = Year 12 mathematics for literature group B / Mathematics A, B, C for vocational high school 3 = Mathematics in the second year of senior high school 4 = Mathematics in the first year of senior high school 5 = Below mathematics in the first year of senior high school 6 = No minimum level of mathematics is required
CHINESE TAIPEI	IN-B-01B	D	Stem of the question changed: What is the highest level mathematics course that pre-service teachers in this program are required to have completed in senior high school? National categories recoded to fit international categories: 1 = Year 12 mathematics for science group A 2 = Year 12 mathematics for literature group B 3 = Mathematics in the second year of senior high school 4 = Mathematics in the first year of senior high school 5 = Below mathematics in the first year of senior high school 6 = No minimum level of mathematics is required 7 = Mathematics A, B, C for vocational high school 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
GEORGIA	IN-B-01A	D	Nationally defined categories: 1 = 12 years of learning (advanced level) 2 = 12 years of learning 3 = 11 years of learning 4 = 10 years of learning 5 = Below 10 years of learning 6 = No minimum level of mathematics is required

Country	Item ID	Code	Documentation
GEORGIA	IN-B-01B	D	Level National categories recoded to fit international categories: 1 = Stereometry 2 = Trigonometry 3 = Logarithmic equations 4 = Quadratic equations 5 = Limits 6 = Category not administered or data not available 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
GERMANY	IN-B-01A	D	Stem of the question changed: What is the minimum level of mathematics that these future teachers are required to have completed in in their own school? National categories recoded to fit international categories: 1 = 12th and 13th grade (Advanced course) 2 = 12th and 13th grade (Basic course) 3 = 11th grade 4 = 10th grade 5 = Category not administered or data not available 6 = Category not administered or data not available
GERMANY	IN-B-01B	X	Question not administered or data not available
MALAYSIA	IN-B-01A	D	Nationally defined categories: 1 = Form 6 (Advanced level) 2 = Form 6 3 = Form 5 4 = Form 4 5 = Below Form 4 6 = No minimum level of mathematics is required
MALAYSIA	IN-B-01B	D	Subject National categories recoded to fit international categories: 1 = Mathematics C 2 = Further Mathematics C 3 = Mathematics S 4 = Mathematics T 5 = Further Mathematics T 6 = Additional Mathematics 7 = Mathematics KBSM 8 = Mathematics KBSR 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
NORWAY	IN-B-01A	D	Nationally defined categories: 1 = 3 years mathematics (3MX) i.e. grade 13 2 = 3 years mathematics (3MZ) i.e. grade 13 3 = 2 years mathematics, i.e. grade 12 4 = 1 year mathematics, i.e. grade 11 5 = Mathematics from primary and lower secondary 6 = No minimum level of mathematics is required
NORWAY	IN-B-01B	X	Question not administered or data not available

Country	Item ID	Code	Documentation
OMAN	IN-B-01A	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = Grade 12 3 = Grade 11 4 = Grade 10 5 = Category not administered or data not available 6 = No minimum level of mathematics is required
OMAN	IN-B-01B	D	National categories recoded to fit international categories: 1 = Limits and continuity 2 = Derivation 3 = Integration 4 = Conic sections 5 = Arithmetic and geometric series 6 = Probability 7 = Random Variable and probability distribution 8 = Z Test 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
PHILIPPINES	IN-B-01A	D	Nationally defined categories: 1 = Year 12 (Advanced level) 2 = Year 12 3 = Year 11 4 = Year 10 / fourth year 5 = Below year 10 / below fourth year 6 = No minimum level of mathematics is required
PHILIPPINES	IN-B-01B	D	National categories recoded to fit international categories: 1 = Integral calculus 2 = Differential calculus 3 = Analytic geometry 4 = Trigonometry 5 = Advanced algebra 6 = Plane geometry 7 = Business mathematics 8 = Statistics 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know
POLAND	IN-B-01A-01B	X	Question not administered or data not available
RUSSIAN FEDERATION	IN-B-01A	D	Gang punched to "Year 11"
RUSSIAN FEDERATION	IN-B-01B	X	Question not administered or data not available
SINGAPORE	IN-B-01A	D	Nationally defined categories: 1 = A level mathematics 2 = Polytechnic mathematics 3 = AO Mathematics / O level additional mathematics 4 = O level mathematics 5 = N level mathematics or below 6 = No minimum level of mathematics is required
SINGAPORE	IN-B-01B	D	National categories recoded to fit international categories: 1 = A level mathematics 2 = Polytechnic mathematics 3 = AO mathematics / O level additional mathematics 4 = O level mathematics 5 = N level mathematics or below 6 = Category not administered or data not available 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't know

Country	Item ID	Code	Documentation
SPAIN	IN-B-01A	D	Nationally defined categories: 1 = Year 2 of baccalaureate (natural sciences and health sciences / technology options) 2 = Year 2 of baccalaureate (social sciences) 3 = Year 1 of baccalaureate 4 = Year 4 of compulsory secondary education 5 = Lower than year 4 of compulsory secondary education 6 = No minimum level of mathematics is required
SPAIN	IN-B-01B	D	National categories recoded to fit international categories: 1 = Mathematics II 2 = Mathematics I 3 = Mathematics applied to social sciences II 4 = Mathematics applied to social sciences I 5 = Mathematics applied to forms 6 = Mathematics option B (year 4 compulsory secondary education) 7 = Mathematics option A (year 4 compulsory secondary education) 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = I don't know
SWITZERLAND	IN-B-01A	D	Nationally defined categories: 1 = Level of general qualification for university entrance with main focus on mathematics / physics 2 = Level of general qualification for university entrance 3 = College level 4 = Lower secondary level 5 = Less than the lower secondary level 6 = There is no need of a minimal level in mathematics
SWITZERLAND	IN-B-01B	D	Degree National categories recoded to fit international categories: 1 = Level of general qualification for university entrance with main focus on mathematics / physics 2 = Level of general qualification for university entrance 3 = College level 4 = Lower secondary level 5 = Less than the lower secondary level 6 = There is no need of a minimal level in mathematics 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Unknown
THAILAND	IN-B-01A	D	Nationally defined categories: 1 = Year 6 (Advanced level) 2 = Year 6 3 = Year 5 4 = Year 4 5 = Below Year 4 6 = No minimum level of mathematics is required
THAILAND	IN-B-01B	D	National categories recoded to fit international categories: 1 = Math 016 year 6 science program 2 = Math 046 year 6 math-language program 3 = Year 3 semester 2 4 = Math 204 year 2 semester 2 5 = Category not administered or data not available 6 = Category not administered or data not available 7 = Category not administered or data not available 8 = Category not administered or data not available 9 = Category not administered or data not available 10 = Category not administered or data not available 11 = Don't Know

Country	Item ID	Code	Documentation
UNITED STATES	IN-B-01A	D	<p>Stem of the question changed: What is the minimum number of years of mathematics that these future teachers are required to have completed in high school?</p> <p>National categories recoded to fit international categories: 1 = 4 2 = 3 3 = 2 4 = 1 5 = Category not administered or data not available 6 = No minimum number of years of mathematics is required</p>
UNITED STATES	IN-B-01B	D	<p>National categories recoded to fit international categories: 1 = General Mathematics 2 = Algebra I or Integrated Math 1 3 = Geometry or Integrated Math 2 4 = Algebra II or Integrated Math 3 5 = Integrated Math 4 6 = Functions, Statistics, Trigonometry (FST) 7 = Pre-Calculus or Pre-Calculus and Discrete Mathematics (PDM) 8 = Statistics or AP Statistics 9 = Calculus or AP Calculus 10 = No mathematics requirements exist 11 = Category not administered or data not available</p>

IN-B-02**Question:**

What is the minimal qualification normally required for entry into the program?

1 = Completion of <ISCED level 2>

2 = Completion of <ISCED level 3>

3 = Completion of <ISCED level 4>

4 = Completion of <ISCED level 5, 1st degree>

5 = Completion of <ISCED level 5, 2nd degree or higher>

Variable Name(s): MIB002

Country	Item ID	Code	Documentation
BOTSWANA	IN-B-02	D	Nationally defined categories: 1 = Junior Certificate 2 = BGCSE / COSC 3 = Diploma Certificate 4 = 1st degree 5 = Masters or higher
CHINESE TAIPEI	IN-B-02	D	National categories recoded to fit international categories: 1 = Junior high school 2 = Senior high school or vocational high school courses 3 = Non-higher education beyond senior high school / First year university courses 4 = Bachelor degree 5 = Master's degree or doctor's degree
GERMANY	IN-B-02	D	Stem of the question changed: What is the minimal qualification normally required for entry into the first phase of this program?
POLAND	IN-B-02	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = State certificate - passing maturity exam 3 = Completion of post-secondary school 4 = Possession of bachelor diploma (completion of 1st degree study) 5 = Having master degree (completion of 1st degree study)
SPAIN	IN-B-02	D	Gang punched to "Baccalaureate"

IN-B-03A-F**Question:**

Please check the subject areas (by grade levels) for which this program prepares its <future teachers> to teach. (Check "Generalist" only if the <future teacher> is being prepared for all of the four subject-matters listed; check "Not applicable" only if the program has no preparation for any of the grades shown at the beginning of a row).

- A. <Pre-primary>
- B. <Grades 1-3>
- C. <Grades 4-6>
- D. <Grades 7-9>
- E. <Grades 10-12>
- F. <Grades 13-14>
- 1 = Mathematics
- 2 = Sciences
- 3 = Literacy (national language)
- 4 = Social Studies
- 5 = Generalist
- 6 = Other
- 7 = Not applicable

Variable Name(s): MIB003A, MIB003B, MIB003C, MIB003D, MIB003E, MIB003F

Country	Item ID	Code	Documentation
BOTSWANA	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-primary 2 = Standards 1-3 3 = Standards 4-7 4 = Forms 1-3 5 = Forms 4-5 6 = Form 6
CANADA	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-primary 2 = Grades 1-3 3 = Grades 4-6 4 = Grades 7-9 (grade 7 to secondary 2) 5 = Grades 10-12 (secondary 3 to secondary 5) 6 = Grades 13-14 (college 1 to college 2, CEGEP 1 to CEGEP 2)
CHILE	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-school 2 = Basic years 1st to 4th 3 = Basic years 5th to 8th 4 = Middle years 1st to 2nd 5 = Third Middle 6 = Fourth Middle
CHINESE TAIPEI	IN-B-03A-03E	D	National dimensions recoded to fit international dimensions: 1 = Preschool 2 = 1-3 grades 3 = 4-6 grades 4 = 7-9 grades 5 = Senior high school 6 = Dimension not administered or data not available
CHINESE TAIPEI	IN-B-03F	X	Dimension not administered or data not available
GEORGIA	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-primary 2 = Grades 1-3 3 = Grades 4-6 4 = Grades 7-9 5 = Grades 10-12 6 = Grades 13-14

Country	Item ID	Code	Documentation
GERMANY	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Kindergarten 2 = Grades 1-4 3 = Grades 5-6 4 = Grades 7-9 / 10 5 = Grades 10-12 / 13 6 = Vocational school
MALAYSIA	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Kindergarten, TADIK, TASKA 2 = Standard 1-3 3 = Standard 4-6 4 = Form 1-3 5 = Form 4 – Form 6 (Lower) 6 = Form 6 (upper)
NORWAY	IN-B-03A-03E	D	National dimensions recoded to fit international dimensions: 1 = Kindergarten 2 = 1st - 4th grade 3 = 5th - 7th grade 4 = 8th - 10th grade 5 = 11th - 13th grade 6 = Dimension not administered or data not available
NORWAY	IN-B-03F	X	Dimension not administered or data not available
OMAN	IN-B-03A	D	Pre-primary
OMAN	IN-B-03B-03F	X	Dimension not administered or data not available
PHILIPPINES	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-elementary 2 = Grades 1-3 3 = Grades 4-6 4 = 1st-3rd year high school 5 = 4th-high school-2nd year college 6 = 3rd year college-4th year college
POLAND	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-primary education 2 = Grades 1-3 of the primary school 3 = Grades 4-6 of the primary school 4 = Lower secondary school 5 = Upper secondary school 6 = Post-secondary school
RUSSIAN FEDERATION	IN-B-03A-03D	D	National dimensions recoded to fit international dimensions: 1 = Preprimary 2 = Grades 1-4 3 = Grades 5-9 4 = Grades 10-11 5 = Dimension not administered or data not available 6 = Dimension not administered or data not available
RUSSIAN FEDERATION	IN-B-03E-03F	X	Dimension not administered or data not available
SINGAPORE	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Kindergarten 2 = Primary 1-3 3 = Primary 4-6 4 = Lower secondary 5 = Upper secondary 6 = JC / Pre-U / ITE / polytechnic

Country	Item ID	Code	Documentation
SPAIN	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-primary education 2 = Years 1-3 of primary education 3 = Years 4-6 of primary education 4 = Years 1-2 of compulsory secondary education 5 = Years 3-4 of compulsory secondary education 6 = Years 1-2 of baccalaureate
SWITZERLAND	IN-B-03A-03E	D	National dimensions recoded to fit international dimensions: 1 = Kindergarten 2 = Kindergarten – grades 2-3 (basic level) 3 = Grade 1-6 (Primary school) 4 = Grade 7-9 (Secondary school) 5 = Grade 10-13 (High school) 6 = Dimension not administered or data not available
SWITZERLAND	IN-B-03F	X	Dimension not administered or data not available
THAILAND	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-primary 2 = Grade 1 – 3 3 = Grade 4 – 6 4 = Year 1 – 3 5 = Year 4 – 6 6 = Undergraduate year 1 – 2
UNITED STATES	IN-B-03A-03F	D	Nationally defined dimensions: 1 = Pre-elementary 2 = Grades 1-3 3 = Grades 4-6 4 = Grades 7-9 5 = Grades 10-12 6 = Grades 13-14

IN-B-05

Question:

Of the <future teachers> currently in their final year, about what fraction entered the program part time?

- 1 = None
- 2 = More than 0, less than $\frac{1}{4}$
- 3 = More than $\frac{1}{4}$, less than $\frac{1}{2}$
- 4 = More than $\frac{1}{2}$, less than $\frac{3}{4}$
- 5 = More than $\frac{3}{4}$, but not all
- 6 = All of them

Variable Name(s): MIB005

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-B-05	D	Stem of the question changed: Of the pre-service teachers currently in their final year (completing pedagogical practicum this year), about what fraction entered the program part time?
NORWAY	IN-B-05	X	Question not administered or data not available
POLAND	IN-B-05	X	Question not administered or data not available

IN-B-07A-F**Question:**

For each of the following years, how many <future teachers> began or will begin this program?

A = 2008 (please estimate)

B = 2007

C = 2006

D = 2005

E = 2004

F = 2003

Variable Name(s): MIB007A, MIB007B, MIB007C, MIB007D, MIB007E, MIB007F

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-B-07A-07F	D	<p>Stem of the question changed: For each of the following years, how many mathematics pre-service teachers began or will begin this mathematics secondary education program (including pedagogical practicum)? If for some particular year, the number is not yet be sure, please give the estimate number</p> <p>Nationally defined dimensions: 1 = 2008 2 = 2007 3 = 2006 4 = 2005 5 = 2004 6 = 2003</p>
GERMANY	IN-B-07A-07F	D	<p>Stem of the question changed: For each of the following years, how many future teachers began or will begin the first phase of this program?</p>
POLAND	IN-B-07A-07F	D	<p>Stem of the question changed: Please indicate the number of students entering the teaching specialties such studies in the years listed below? (If students choose the specialty during their studies, please enter the total number of students beginning the studies)</p>

IN-B-08AA-AF**Question:**

a) For each of the following years, how many <future teachers> completed this program successfully? (If the 2007 and/or 2008 cohort has not yet finished, please estimate)

A = 2008 (please estimate)

B = 2007 (please estimate if necessary)

C = 2006

D = 2005

E = 2004

F = 2003

Variable Name(s): MIB008A1, MIB008A2, MIB008A3, MIB008A4, MIB008A5, MIB008A6

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-B-08AA-08AF	D	<p>Stem of the question changed: For each of the following years, how many mathematics pre-service teachers completed this mathematics secondary education program (including pedagogical practicum) successfully? (If for some particular year, the number is not yet sure, please give the estimate number)</p> <p>Nationally defined dimensions: 1 = 2008 2 = 2007 3 = 2006 4 = 2005 5 = 2004 6 = 2003</p>
GERMANY	IN-B-08AA-08AF	D	<p>Stem of the question changed: For each of the following years, how many future teachers completed the first phase of this program successfully? (If the 2007 and/or 2008 cohort has not yet finished, please estimate)</p>

IN-B-08B1-B6**Question:**

b) Of these <future teachers>, how many finished with a qualification that made them eligible to teach Mathematics (either as a generalist or specialist teacher)?

A = 2008 (please estimate)

B = 2007 (please estimate if necessary)

C = 2006

D = 2005

E = 2004

F = 2003

Variable Name(s): MIB008B1, MIB008B2, MIB008B3, MIB008B4, MIB008B5, MIB008B6

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-B-08B1-08B6	D	<p>Stem of the question changed: Of these mathematics pre-service teachers, how many finished with a qualification that made them eligible to teach Mathematics (either as a generalist or specialist teacher)? If for some particular year, the number is not yet be sure, please give the estimate number</p> <p>Nationally defined dimensions: 1 = 2008 2 = 2007 3 = 2006 4 = 2005 5 = 2004 6 = 2003</p>
POLAND	IN-B-08B1-08B6	D	<p>How many of the above graduates gained formal qualifications to teach mathematics in school or teach in the 1-3 grades of the primary school?</p>

IN-C-01**Question:**

Who sets the policies that govern which applicants are admitted to this program?

1 = The policies are set by each institution without reference to any outside requirements

2 = The policies are set by regional or national authorities

3 = The policies are set by each institution, within guidelines set by regional or national authorities

4 = There is no selection for this phase; all applicants are admitted

Variable Name(s): MIC001

Country	Item ID	Code	Documentation
GERMANY	IN-C-01	D	<p>Stem of the question changed: From which instance the conditions of admission for the academic study (1st phase of the program) were constituted?</p> <p>Nationally defined categories: 1 = The admission requirements are set by each federal state independent from any outside requirements 2 = The admission requirements are set by national authorities 3 = The admission requirements are set by each federal state, within guidelines set by national authorities 4 = There is no selection for this phase; all applicants are admitted</p>

IN-C-02A-J**Question:**

Which of the following characteristics or sources of information are used in selecting entering <future teachers> for this teacher preparation program? Please indicate below how important each of the characteristics or sources is in the selection process.

- A. The candidates' overall level of attainment in their final year of <secondary> schooling, as measured by school marks or grades
 - B. The candidates' performance at the end of their final year of <secondary> schooling, as measured by their performance on a national or state examination
 - C. The candidates' performance on an examination specifically for admission to this training institution
 - D. Suitability for teaching, including matters such as personal qualities, experience, motivation, etc. May be assessed by interview, or by written application
 - E. Demonstrated high level of achievement in mathematics
 - F. Gender
 - G. Belonging to groups under-represented in the teaching profession
 - H. The order in which the candidates apply
 - I. Region of residence
 - J. The age of the candidates
- 1 = Not considered
2 = Not very important
3 = Somewhat important
4 = Very important

Variable Name(s): MIC002A, MIC002B, MIC002C, MIC002D, MIC002E, MIC002F, MIC002G, MIC002H, MIC002I, MIC002J

Country	Item ID	Code	Documentation
GERMANY	IN-C-02A-02B	D	Upper secondary
GERMANY	IN-C-02C	D	The candidates' performance in a special admission procedure for this state
POLAND	IN-C-02A	D	On the secondary school leaving diploma
POLAND	IN-C-02B	D	Performance on the Matura exam (Matura exam is a national exam run by the state-run Central Examination Commission when leaving secondary school)

IN-C-03A-B**Question:**

Does your institution have special strategies in place to attract <future teachers> into this program to become:

- A. <Primary> or <secondary> school teachers in general?
 B. Teachers of mathematics?
 1 = Yes
 2 = No

Variable Name(s): MIC003A, MIC003B

Country	Item ID	Code	Documentation
GERMANY	IN-C-03A-03B	D	Stem of the question changed: Did your state at the beginning of the academic year 2003/2004 have special strategies in place to spark interest in this program and campaign future...

IN-C-04**Question:**

With reference to national norms, how do <future teachers> entering this program rate with respect to their prior academic achievement?

- 1 = They are generally very high achievers (e.g., the top 10 percent of their age group).
 2 = They are generally high achievers (e.g., the top 20 percent of their age group).
 3 = They are generally above-average achievers (for their age group).
 4 = They are generally average achievers (for their age group).
 5 = They are generally below-average achievers (for their age group).
 6 = They are generally far below-average achievers (for their age group).

Variable Name(s): MIC004

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-C-04	D	Stem of the question changed: With reference to the same age group of students of nation, how do pre-service teachers entering this program generally rate with respect to their prior academic achievement? Nationally defined categories: 1 = They are very high achievers (e.g., the top 10 percent of their age group). 2 = They are high achievers (e.g., the top 20 percent of their age group). 3 = They are above-average achievers (for their age group). 4 = They are average achievers (for their age group). 5 = They are below-average achievers (for their age group). 6 = They are far below-average achievers (for their age group).

IN-C-05**Question:**

In selecting <future teachers> for this program, do you make a special effort to attract individuals who were working full-time in non-teaching occupations, but are now ready to make a career change?

1 = Yes

2 = No

Variable Name(s): MIC005

Country	Item ID	Code	Documentation
GERMANY	IN-C-05	D	Stem of the question changed: Have there been special efforts from your state at the beginning of the academic year 2003/2004 to attract individuals for your program who were working full-time and planning to make a career change (so-called alternative routes)?

IN-D-02-02T**Question:**

If the program requirements are described in printed form, please provide a copy. If the program is not in printed form, please mark this box.

Variable Name(s): MID002, MID002T

Country	Item ID	Code	Documentation
POLAND	IN-D-02-02T	D	Stem of the question changed: If the content of a program of study is described in the document available in paper version, please attach a copy of that document and write down its name. If there is no such document, please select this square

IN-D-03**Question:**

<Courses> of a general or theoretical nature designed to develop judgment and understanding about human beings' relationship to the social, cultural, and natural environment (e.g., natural and social sciences, languages, drama, music, art, philosophy, religion, etc.).
If you do not have this information in the program, please mark the box below and proceed to Question 4.

Variable Name(s): MID003

Country	Item ID	Code	Documentation
CHILE	IN-D-03	D	Courses of general content
GEORGIA	IN-D-03	D	Humanitarian subject
PHILIPPINES	IN-D-03	D	General education
SPAIN	IN-D-03	D	Humanities
SWITZERLAND	IN-D-03	D	Humanistic studies

IN-D-03A-B**Question:**

A. Number of <liberal arts> <courses> for the duration of the program:
B. Number of teaching contact hours <future teachers> attend per <liberal arts> <course> for the duration of the program:

Variable Name(s): MID003A, MID003B

Country	Item ID	Code	Documentation
CHILE	IN-D-03A-03B	D	Courses of general content
GEORGIA	IN-D-03A-03B	D	Humanitarian subject
PHILIPPINES	IN-D-03A-03B	D	General education
POLAND	IN-D-03A-03B	D	Humanities, social sciences and science
SWITZERLAND	IN-D-03A-03B	D	Humanistic studies

IN-D-05**Question:**

<Courses> dealing mainly with the structure, sequence, content, and level of competence required from pupils to successfully learn from the school mathematics curriculum (<primary> or <secondary> levels). Examples of such <courses> are “Structure and Content of the Lower <Secondary> Mathematics Curriculum”, “Development and Understanding of the School Mathematics Curriculum”, etc.

If you do not have this information in the program, please mark the box below and proceed to Question 6.

Variable Name(s): MID005

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-D-05	D	Stem of the question changed: Courses in mathematics related to the primary and secondary mathematics curriculum
GERMANY	IN-D-05	X	Question not administered or data not available
NORWAY	IN-D-05	D	Courses dealing with questions related to learning and teaching of mathematics (i.e., didactics of mathematics). Hence, these are courses in which pupils' cognition and pupils' ways of thinking about mathematical concepts are treated. Courses dealing with structure, order, content, and competence levels required by pupils in the relevant mathematics curricula for school, also belong under this headline.

IN-D-05A-B**Question:**

A. Number of <courses> in mathematics content related to the school mathematics curriculum for the duration of the program:

B. Number of teaching contact hours <future teachers> attend per <course> in mathematics content related to the school mathematics curriculum for the duration of the program:

Variable Name(s): MID005A, MID005B

Country	Item ID	Code	Documentation
GERMANY	IN-D-05A	X	Question not administered or data not available
GERMANY	IN-D-05B	X	Question not administered or data not available
NORWAY	IN-D-05A	D	Number of mathematics pedagogy courses in the program and their total amount of credit points
NORWAY	IN-D-05B	D	Number of teaching hours in mathematics pedagogy courses in the program

IN-D-06**Question:**

<Courses> dealing with the methods of teaching and learning mathematics (e.g., mathematics <pedagogy>, didactics of mathematics). These <courses> could include treatment of pupils' cognition (e.g., how one learns mathematics) or pupils' thinking in relation to mathematics concepts. Examples of such types of units are <courses> like "Learner Diversity and the Teaching of Subject Matter: Mathematics," "<Primary> and Middle School Mathematics: Teaching Developmentally", etc.

If you do not have this information in the program, please mark the box below and proceed to Question 7.

Variable Name(s): MID006

Country	Item ID	Code	Documentation
GERMANY	IN-D-06	X	Question not administered or data not available
NORWAY	IN-D-06	D	Courses dealing with questions related to learning and teaching of mathematics (i.e., didactics of mathematics). Hence, these are courses in which pupils' cognition and pupils' ways of thinking about mathematical concepts are treated. Courses dealing with structure, order, content, and competence levels required by pupils in the relevant mathematics curricula for school, also belong under this headline.

IN-D-06A-B**Question:**

A. Number of mathematics <pedagogy> <courses> for the duration of the program:

B. Number of teaching contact hours <future teachers> attend per mathematics <pedagogy> <course> for the duration of the program:

Variable Name(s): MID006A, MID006B

Country	Item ID	Code	Documentation
GERMANY	IN-D-06A	X	Question not administered or data not available
GERMANY	IN-D-06B	X	Question not administered or data not available
NORWAY	IN-D-06A	D	Number of mathematics pedagogy courses in the program
NORWAY	IN-D-06B	D	Number of teaching hours in mathematics pedagogy courses in the program
POLAND	IN-D-06A-06B	D	General didactics

IN-D-07**Question:**

<Courses> on the study of education utilizing such disciplines as history, philosophy, sociology, psychology, social psychology, anthropology, economics, and political science, or such interdisciplinary fields as comparative and international education, multicultural education, community and adult education, and many others. All such study stresses diverse perspectives in understanding, analyzing, and implementing educational theory and practice.

If you do not have this information in the program, please mark the box below and proceed to Question 8.

Variable Name(s): MID007

Country	Item ID	Code	Documentation
GERMANY	IN-D-07	X	Question not administered or data not available
NORWAY	IN-D-07	D	Courses on “the art of teaching”, including discussions of the use of teaching strategies. These courses include the study of how those teaching strategies are related to the instructor’s own philosophical beliefs about teaching and the pupils’ background knowledge and experiences, personal circumstances, social and classroom environment, as well as setting learning goals. This category also includes courses in pedagogy utilizing disciplines like history, philosophy, sociology, psychology, anthropology, economics, and political science together with interdisciplinary fields like comparative and international education, multicultural education, adult education, etc., to the extent that these topics focus on diverse perspectives of understanding, analysis and implementation of pedagogical theory and practice.

IN-D-07A-B**Question:**

A. Number of professional foundations <courses> for the duration of the program:

B. Number of teaching contact hours <future teachers> attend per professional foundations <course> for the duration of the program:

Variable Name(s): MID007A, MID007B

Country	Item ID	Code	Documentation
GERMANY	IN-D-07A	X	Question not administered or data not available
GERMANY	IN-D-07B	X	Question not administered or data not available
NORWAY	IN-D-07A	D	Number of general pedagogy courses in the program and their total amount of credit points
NORWAY	IN-D-07B	D	Number of teaching hours in general pedagogy courses in the program

IN-D-08**Question:**

<Courses> on the “art or science of teaching” providing instruction on the correct use of teaching strategies. In addition these <courses> include the study of the correlation of those teaching strategies with the instructor’s own philosophical beliefs of teaching and pupils’ background knowledge and experiences, personal situations, social and classroom environment, as well as setting learning goals.

If you do not have this information in the program, please mark the box below and proceed to Question 9.

Variable Name(s): MID008

Country	Item ID	Code	Documentation
GERMANY	IN-D-08	X	Question not administered or data not available
NORWAY	IN-D-08	D	Courses on “the art of teaching”, including discussions of the use of teaching strategies. These courses include the study of how those teaching strategies are related to the instructor’s own philosophical beliefs about teaching and the pupils’ background knowledge and experiences, personal circumstances, social and classroom environment, as well as setting learning goals. This category also includes courses in pedagogy utilizing disciplines like history, philosophy, sociology, psychology, anthropology, economics, and political science together with interdisciplinary fields like comparative and international education, multicultural education, adult education, etc., to the extent that these topics focus on diverse perspectives of understanding, analysis and implementation of pedagogical theory and practice.

IN-D-08A-B**Question:**

A. Number of general <pedagogy> <courses> for the duration of the program:

B. Number of teaching contact hours <future teachers> attend per general <pedagogy> <course> for the duration of the program:

Variable Name(s): MID008A, MID008B

Country	Item ID	Code	Documentation
GERMANY	IN-D-08A	X	Question not administered or data not available
GERMANY	IN-D-08B	X	Question not administered or data not available
NORWAY	IN-D-08A	D	Number of general pedagogy courses in the program and their total amount of credit points
NORWAY	IN-D-08B	D	Number of teaching hours in general pedagogy courses in the program
POLAND	IN-D-08A-08B	D	Pedagogy and general didactics

IN-D-10**Question:**

Which of the following statements best describes attendance at scheduled <class times> by <future teachers> registered in your program?

1 = All the <future teachers> in the program normally attend all <class times>.

2 = On average, the <future teachers> in the program attend most, but not all <class times>.

3 = On average, the <future teachers> in this program attend less than half of <class times>.

Variable Name(s): MID010

Country	Item ID	Code	Documentation
CHILE	IN-D-10	D	Scheduled class times
CHINESE TAIPEI	IN-D-10	D	Curriculum and activity
GEORGIA	IN-D-10	D	Contact hours
GERMANY	IN-D-10	D	Course dates
NORWAY	IN-D-10	D	Class lessons
OMAN	IN-D-10	D	All lectures
PHILIPPINES	IN-D-10	D	Class sessions
POLAND	IN-D-10	D	Courses
RUSSIAN FEDERATION	IN-D-10	D	Lessons
SINGAPORE	IN-D-10	D	Lessons
SPAIN	IN-D-10	D	Teaching hours
SWITZERLAND	IN-D-10	D	Lessons

IN-D-11A-AB

Question:

In the program requirements, guidelines and other documentation, how much weight is given to each of the goals listed below? (If the program prepares specialists in various subject-matters, answer in terms of persons preparing to be mathematics teachers.)

- A. Study of the curriculum content to be taught in schools
 - B. Study of the mathematics content in the school curriculum
 - C. Study of mathematics at tertiary level
 - D. Study of other disciplines at tertiary level <Pedagogical> Content Knowledge
 - E. Study of <pedagogy>/teaching methods specific to the teaching of mathematics
 - F. Knowledge about pupil learning in mathematics
 - G. Knowing common pupil misunderstandings in mathematics
 - H. Knowing how to build on pupils' prior knowledge in mathematics General <Pedagogy>/Educational Foundations
 - I. Learning classroom management skills
 - J. Managing disruptive pupils
 - K. Planning lessons based on recommended <pedagogical> principles Assessing Learning
 - L. Knowing how to develop good assessment tools
 - M. Using formative assessment to plan learning activities
 - N. Conducting fair and valid summative assessments of pupil learning
 - O. Interpreting data from externally-conducted tests
 - P. Studying child development
 - Q. Specific strategies for teaching pupils with behavioral and emotional problems
 - R. Specific strategies and curriculum for teaching pupils with learning disabilities
 - S. Specific strategies and curriculum for teaching gifted pupils
 - T. Specific strategies and curriculum for teaching pupils from diverse cultural backgrounds
 - U. Accommodating the needs of pupils with physical disabilities in your classroom
 - V. Working with children from poor or disadvantaged backgrounds Preparation for Further Development as a Teacher
 - W. Developing the knowledge and skills to do teacher action research
 - X. Learning to reflect on one's own learning and teaching practices
 - Y. Learning to improve one's own teaching by working with other teachers Understanding the School Environment
 - Z. Study of the communities in which <future teachers> are likely to teach
 - AA. Knowledge of the school system in a particular nation/state/district
 - AB. Knowledge of legal and professional standards/ requirements for teachers
- 1 = Little or no weight
2 = Some weight
3 = Moderate weight
4 = Major weight

Variable Name(s): MID011A, MID011B, MID011C, MID011D, MID011E, MID011F, MID011G, MID011H, MID011I, MID011J, MID011K, MID011L, MID011M, MID011N, MID011O, MID011P, MID011Q, MID011R, MID011S, MID011T, MID011U, MID011V, MID011W, MID011X, MID011Y, MID011Z, MID011AA, MID011AB

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-D-11A	D	<p>Stem of the question changed: In the act enforcement rules, guidelines and other documentation, how much weight is given to each of the goals listed below? (If the program prepares specialists in various subject-matters, answer in terms of persons preparing to be mathematics teachers)</p> <p>Study of the curriculum content to be taught in primary and secondary</p>
CHINESE TAIPEI	IN-D-11B	D	<p>Stem of the question changed: In the act enforcement rules, guidelines and other documentation, how much weight is given to each of the goals listed below? (If the program prepares specialists in various subject-matters, answer in terms of persons preparing to be mathematics teachers)</p> <p>Study of the mathematics content in the primary and secondary curriculum</p>

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-D-11C-11Z	D	Stem of the question changed: In the act enforcement rules, guidelines and other documentation, how much weight is given to each of the goals listed below? (If the program prepares specialists in various subject-matters, answer in terms of persons preparing to be mathematics teachers)
NORWAY	IN-D-11AA	X	Dimension not administered or data not available
POLAND	IN-D-11A-11Q,11S-11Z	D	Stem of the question changed: In the program requirements, guidelines and other documentation, how much weight is given to each of the goals listed below?
POLAND	IN-D-11R	D	Stem of the question changed: In the program requirements, guidelines and other documentation, how much weight is given to each of the goals listed below? Accommodate the needs of pupils with difficulties in learning (for example dyslexia, dysgraphia)
SWITZERLAND	IN-D-11AA	D	Knowledge of the school system in a particular nation / canton / district
SWITZERLAND	IN-D-11Z	X	Dimension not administered or data not available

IN-D-14A-D**Question:**

If you answered "Yes" to Question 13, please indicate where these guidelines on competencies or performance standards come from.

- A. National government
 - B. State/provincial government or regional education authorities
 - C. This institution
 - D. There is no such document
- 1 = Yes
2 = No

Variable Name(s): MID014A, MID014B, MID014C, MID014D

Country	Item ID	Code	Documentation
GERMANY	IN-D-14B	D	State government
GERMANY	IN-D-14C	D	The several institutions (universities, state seminar)
NORWAY	IN-D-14D	X	Dimension not administered or data not available
POLAND	IN-D-14B	D	Regional government or regional education administration
POLAND	IN-D-14D	X	Question not administered or data not available
SWITZERLAND	IN-D-14B	D	Canton / provincial government or regional education authorities

IN-E-02A1-A5**Question:**

Although it may be difficult in some cases to clearly distinguish these two types, please indicate as best you can the number of days that <future teachers> in your programs are expected to spend in <primary> and <secondary> school settings by year (either in extended teaching practice or introductory field experiences).

A. Number of days <future teachers> are expected to spend in extended teaching practice

1 = Year 1

2 = Year 2

3 = Year 3

4 = Year 4

5 = Year 5

Variable Name(s): MIE002A1, MIE002A2, MIE002A3, MIE002A4, MIE002A5

Country	Item ID	Code	Documentation
GERMANY	IN-E-02A1-02A2	X	Dimension not administered or data not available
GERMANY	IN-E-02A3-02A5	X	Dimension not administered or data not available
SPAIN	IN-E-02A4-02A5	X	Category not administered or data not available

IN-E-02B1-B5**Question:**

Although it may be difficult in some cases to clearly distinguish these two types, please indicate as best you can the number of days that <future teachers> in your programs are expected to spend in <primary> and <secondary> school settings by year (either in extended teaching practice or introductory field experiences).

B. Estimated average number of hours per day for extended teaching practice

1 = Year 1

2 = Year 2

3 = Year 3

4 = Year 4

5 = Year 5

Variable Name(s): MIE002B1, MIE002B2, MIE002B3, MIE002B4, MIE002B5

Country	Item ID	Code	Documentation
GERMANY	IN-E-02B1-02B2	X	Dimension not administered or data not available
GERMANY	IN-E-02B3-02B5	X	Dimension not administered or data not available
SPAIN	IN-E-02B4-02B5	X	Category not administered or data not available

IN-E-02C1-C5

Question:

Although it may be difficult in some cases to clearly distinguish these two types, please indicate as best you can the number of days that <future teachers> in your programs are expected to spend in <primary> and <secondary> school settings by year (either in extended teaching practice or introductory field experiences).

- C. Number of days <future teachers> are expected to spend in introductory field experiences
- 1 = Year 1
 - 2 = Year 2
 - 3 = Year 3
 - 4 = Year 4
 - 5 = Year 5

Variable Name(s): MIE002C1, MIE002C2, MIE002C3, MIE002C4, MIE002C5

Country	Item ID	Code	Documentation
SPAIN	IN-E-02C4-02C5	X	Category not administered or data not available

IN-E-02D1-D5

Question:

Although it may be difficult in some cases to clearly distinguish these two types, please indicate as best you can the number of days that <future teachers> in your programs are expected to spend in <primary> and <secondary> school settings by year (either in extended teaching practice or introductory field experiences).

- D. Estimated average number of hours per day for introductory field experiences
- 1 = Year 1
 - 2 = Year 2
 - 3 = Year 3
 - 4 = Year 4
 - 5 = Year 5

Variable Name(s): MIE002D1, MIE002D2, MIE002D3, MIE002D4, MIE002D5

Country	Item ID	Code	Documentation
SPAIN	IN-E-02D4-02D5	X	Category not administered or data not available

IN-E-03A-L**Question:**

How often are the following activities assigned as part of the introductory field experiences in this program?

- A. Plan lessons
 - B. Teach individual lessons to whole classes
 - C. Tutor individual pupils
 - D. Work with small groups of pupils
 - E. Assist teachers in other ways
 - F. Assist in school activities outside assigned classroom (e.g. sports, field trips)
 - G. Carry out case studies of selected pupils
 - H. Carry out classroom observation
 - I. Collect data for research projects
 - J. Visit families in their homes
 - K. Interview teachers and/or principals
 - L. Observe and/or participate in teachers' meetings
- 1 = Not at all
2 = Rarely
3 = Sometimes
4 = Usually
5 = Don't know

Variable Name(s): MIE003A, MIE003B, MIE003C, MIE003D, MIE003E, MIE003F, MIE003G, MIE003H, MIE003I, MIE003J, MIE003K, MIE003L

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-03B	D	Teach individual lessons to whole classes in primary or secondary schools
CHINESE TAIPEI	IN-E-03C	D	Tutor individual primary or secondary students
CHINESE TAIPEI	IN-E-03D	D	Work with small groups of primary or secondary students
CHINESE TAIPEI	IN-E-03G	D	Carry out case studies of selected primary or secondary students
CHINESE TAIPEI	IN-E-03J	D	Visit families of primary and secondary students in their homes
CHINESE TAIPEI	IN-E-03K	D	Interview teachers or principals in primary or secondary schools
CHINESE TAIPEI	IN-E-03L	D	Observe or participate in primary or secondary teachers' meetings
POLAND	IN-E-03F	D	Assist in school activities outside assigned classroom (e.g. sports, field trips, taking care of students after their lessons)
POLAND	IN-E-03L	D	Observe and / or participate in teachers' meetings (e.g. meetings of formal teacher bodies)

IN-E-04**Question:**

During extended teaching practice, how often do you expect <future teachers> to be observed by a <teacher educator/supervisor>?

- 1 = Every day that the <future teacher> spends in school
 2 = Not every day, but at least once a week
 3 = Every 2-3 weeks
 4 = Once a month or less frequently
 5 = Once every 4 months
 6 = Never

Variable Name(s): MIE004

Country	Item ID	Code	Documentation
CHILE	IN-E-04	D	Practicum supervisor
CHINESE TAIPEI	IN-E-04	D	Supervising professors or school mentors of practicum Nationally defined categories: 1 = Every day that the pre-service teacher spends in primary and secondary school 2 = Not every day, but at least once a week 3 = Every 2-3 weeks 4 = Once a month or less frequently 5 = Once every 4 months 6 = Never
GERMANY	IN-E-04	D	Course leader / course tutor / mentor
RUSSIAN FEDERATION	IN-E-04	D	Supervising instructor
SPAIN	IN-E-04	D	Educator / tutor /supervisor

IN-E-05**Question:**

Do practicing <primary> or <secondary> teachers receive compensation for <supervising/ instructing/mentoring> <future teachers> during their extended teaching practice?

- 1 = Yes
 2 = No

Variable Name(s): MIE005

Country	Item ID	Code	Documentation
GERMANY	IN-E-05	D	Do practicing primary level or secondary level teachers receive compensation for mentoring / supervising trainee teachers / teachers on probation during their extended teaching practice?
SPAIN	IN-E-05	D	Supervising / teaching / tutoring

IN-E-06**Question:**

Do specialists in mathematics have any responsibility for <supervising/ instructing/ mentoring> <future teachers> in this program during their extended teaching practice?

1 = Yes

2 = No

Variable Name(s): MIE006

Country	Item ID	Code	Documentation
GERMANY	IN-E-06	D	Do specialists in mathematics have any responsibility for mentoring / supervising trainee teachers / teachers on probation in this program during their extended teaching practice?
SPAIN	IN-E-06	D	Supervising / teaching / tutoring

IN-E-07**Question:**

For the latest cohort to complete the program, please provide the following information:
The percentage who gained a satisfactory result for their final extended teaching practice

Variable Name(s): MIE007

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-07	D	For the latest cohort to complete the program, please provide the following information: The percentage who gained a satisfactory result for their pedagogical practicum

IN-E-08A-E**Question:**

What is the policy regarding <future teachers> whose performance is unsatisfactory in their extended teaching practice?

A. We have no such policy on this matter.

B. <Future teachers> with performance problems receive special counseling about this problem.

C. <Future teachers> who do not reach a certain threshold in performance fail this requirement.

D. <Future teachers> who fail this performance requirement may be eliminated from the <program>.

E. Generally nothing happens to such <future teachers> as a result of unsatisfactory performance.

1 = Yes

2 = No

Variable Name(s): MIE008A, MIE008B, MIE008C, MIE008D, MIE008E

Country	Item ID	Code	Documentation
GERMANY	IN-E-08D	D	Second phase of training, practical training
POLAND	IN-E-08D	D	Studies

IN-E-09A-M**Question:**

Please indicate whether <supervisors/instructors/mentors> in the extended teaching practice are likely to assume each of the following responsibilities.

Responsibilities for helping <future teachers> to plan

- A. The mathematics content of a lesson
- B. The mathematics <pedagogy> of a lesson
- C. How to deal with pupils with learning problems
- D. How to deal with pupils with behavior problems

Responsibilities for observations

- E. Observing <future teachers> performance in classrooms to which they are assigned
- F. Observing <future teachers> rehearsing their lessons

Responsibilities for instructing, modeling, coaching, etc.

- G. Teaching a lesson to <primary> or <secondary> school pupils that a <future teacher> is expected to observe

- H. Taking charge of a class of <primary> or <secondary> school pupils to help a <future teacher> who has run into difficulties with the class

Responsibilities for giving oral feedback and fostering reflection

- I. Leading group discussions of what <future teachers> are experiencing during their extended teaching practice

- J. Giving <future teachers> oral feedback on the adequacy of the mathematics content in their teaching

- K. Giving <future teachers> oral feedback on their <pedagogical> approach to teaching mathematics

Assessment responsibilities

- L. Providing formal summative assessments to <future teachers> for field experience performance

- M. Writing narrative reports on the field experience performance of <future teachers>

1 = Definitely yes

2 = Probably yes

3 = Probably not

4 = Definitely not

Variable Name(s): MIE009A, MIE009B, MIE009C, MIE009D, MIE009E, MIE009F, MIE009G, MIE009H, MIE009I, MIE009J, MIE009K, MIE009L, MIE009M

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-09A-09M	D	Supervising professors or school mentors of practicum
GERMANY	IN-E-09A-09M	D	Course leader / course tutor
POLAND	IN-E-09A-09M	D	Stem of the question changed: Please indicate whether teacher that takes care about students in the extended teaching practice are likely to assume each of the following responsibilities
SPAIN	IN-E-09A-09M	D	Supervisors / educators / tutors

IN-E-10**Question:**

In extended teaching practice, who determines the structure and nature of the activities undertaken by <future teachers> in the school(s) to which they are assigned?

1 = Only personnel from the school system

2 = Mostly personnel from the school system, with assistance from the staff of the <University/College>

3 = Mostly the staff of the <University/College>, assisted by personnel from the school system

4 = Only the staff of the <University/College>

Variable Name(s): MIE010

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-10	D	<p>Stem of the question changed: In extended teaching practice, who determines the structure and nature of the activities undertaken by pre-service teachers in the primary and secondary schools to which they are assigned?</p> <p>Nationally defined categories: 1 = Only personnel from the primary and secondary practicum school 2 = Mostly personnel from the primary and secondary practicum school, with assistance from the staff of the teacher preparation institution in university 3 = Mostly the staff of the teacher preparation institution in university, assisted by personnel from the primary and secondary practicum school 4 = Only the staff of the teacher preparation institution in university</p>
GERMANY	IN-E-10	D	Study seminar (second phase teacher training educational institution)
OMAN	IN-E-10	D	Your institution

IN-E-11**Question:**

How often do <mentors/supervisors/instructors> of extended teaching practice or introductory field experiences provide written feedback (e.g., grades or reports) on individual <future teachers> to the program?

1 = Never

2 = Only at the very end of the last field experience in the program

3 = least once each year during which the <future teacher> has some field experience

4 = More frequently in each year for which the <future teacher> has some field experience

5 = More frequently in the last year of the program, but not in earlier years

Variable Name(s): MIE011

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-11	D	<p>Stem of the question changed: How often do supervising professors or school mentors of practicum of extended teaching practice or introductory field experiences provide written feedback (e.g., grades or reports) on individual pre-service teachers to the program?</p> <p>Nationally defined categories: 1 = Never 2 = Only at the very end of the last field experience in the program 3 = least once each year during which the <future teacher> has some field experience 4 = More frequently in each year for which the <future teacher> has some field experience 5 = More frequently in pedagogical practicum, but not in earlier years</p>
GEORGIA	IN-E-11	D	Head of teaching practice
GERMANY	IN-E-11	D	Course leader / course tutor
SPAIN	IN-E-11	D	Tutors / supervisors / educators

IN-E-12C1-C2**Question:**

Are the following persons assigned to mentor and assess <future teachers> during <field experience>?

In the mentoring column below, check the category or categories of persons who are typically responsible in this program for mentoring and/or supervising <future teachers> in the school(s) to which they are assigned.

In the assessment column, check the category or categories of persons who are typically responsible in this program for overall assessment of the <future teacher>.

C. Inspector, <pedagogical> advisor or other mid-level administrator in <primary> or <secondary> school system

Mentoring

1 = Yes

2 = No

Assessment

1 = Yes

2 = No

Variable Name(s): MIE012C1, MIE012C2

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-12C1-12C2	D	Inspector, advisor or other mid-level administrator in primary or secondary school system

IN-E-12E1-E2**Question:**

Are the following persons assigned to mentor and assess <future teachers> during <field experience>?

In the mentoring column below, check the category or categories of persons who are typically responsible in this program for mentoring and/or supervising <future teachers> in the school(s) to which they are assigned.

In the assessment column, check the category or categories of persons who are typically responsible in this program for overall assessment of the <future teacher>.

E. Other more senior university/college teaching staff

Mentoring

1 = Yes

2 = No

Assessment

1 = Yes

2 = No

Variable Name(s): MIE012E1, MIE012E2

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-E-12E1-12E2	D	Other more senior university / college teaching staff (e.g., instructors, associate professors,...)

IN-E-12F1-F2

Question:

Are the following persons assigned to mentor and assess <future teachers> during <field experience>?

In the mentoring column below, check the category or categories of persons who are typically responsible in this program for mentoring and/or supervising <future teachers> in the school(s) to which they are assigned.

In the assessment column, check the category or categories of persons who are typically responsible in this program for overall assessment of the <future teacher>.

F. Retired <primary> or <secondary> school teacher or administrator

Mentoring

1 = Yes

2 = No

Assessment

1 = Yes

2 = No

Variable Name(s): MIE012F1, MIE012F2

Country	Item ID	Code	Documentation
POLAND	IN-E-12F1-12F2	D	Retired teacher or school administrator

IN-F-01A-O**Question:**

At what level are the decisions made about the curriculum of this program in your institution? If the appropriate answer lies between "State or Provincial" and "Institutional", please check the answer "Local district". If decisions are made at more than one of these levels, check the level that has the most influence on program policies for the area in question.

- A. Program goals and emphasis
 - B. Selection of textbooks, teaching materials, readings
 - C. Standards of classroom performance expected of graduates
 - D. Standards of content knowledge expected of graduates
 - E. Subject-matter knowledge to be covered in mathematics
 - F. Mathematics <pedagogy> curriculum
 - G. General <pedagogy>/educational foundations curriculum
 - H. <Liberal arts> curriculum
 - I. Number of credits required in program areas
 - J. Length of practical training
 - K. Location of practical training
 - L. Monitoring of <future teachers>' progress through the program
 - M. Quality and frequency of the supervision during practical training
 - N. Type and content of assessments throughout the program
 - O. External examinations
- 1 = Institution
 2 = Local district
 3 = State or Provincial
 4 = National
 5 = Does not apply

Variable Name(s): MIF001A, MIF001B, MIF001C, MIF001D, MIF001E, MIF001F, MIF001G, MIF001H, MIF001I, MIF001J, MIF001K, MIF001L, MIF001M, MIF001N, MIF001O

Country	Item ID	Code	Documentation
CHILE	IN-F-01H	D	General education
CHINESE TAIPEI	IN-F-01L	D	Monitoring and guidance of pre-service teacher' progress through the program
CHINESE TAIPEI	IN-F-01O	D	External examinations throughout the program
GEORGIA	IN-F-01H	D	Humanitarian subject
NORWAY	IN-F-01H	D	General studies (excluding mathematics)
PHILIPPINES	IN-F-01H	D	General education
POLAND	IN-F-01H	D	General knowledge
SPAIN	IN-F-01H	D	Humanities
SWITZERLAND	IN-F-01H	D	Humanities

IN-G-01A-B**Question:**

Please give the number of full-time staff assigned teaching responsibilities in this program.

A. Full-time staff members

Please give the number of part-time staff assigned teaching responsibilities in this program.

B. Part-time staff members

Variable Name(s): MIG001A, MIG001B

Country	Item ID	Code	Documentation
POLAND	IN-G-01B	D	Please give the number of part-time staff assigned teaching responsibilities in this program (employment contract or contract)

IN-G-01CA-CD**Question:**

Please calculate or estimate the percentages of the full-time staff members with teaching responsibilities in this program who hold the following credentials.

- A. <ISCED level 6>
- B. <ISCED level 5A, 2nd degree>
- C. <ISCED level 5A, 1st degree>
- D. Other credentials at <ISCED levels 5B or 4> or less

Variable Name(s): MIG001C1, MIG001C2, MIG001C3, MIG001C4

Country	Item ID	Code	Documentation
BOTSWANA	IN-G-01CD	D	Certificate / Diploma
CANADA	IN-G-01CD	D	Other credentials at lower levels
CHILE	IN-G-01CD	D	Other qualifications of lower rank
CHINESE TAIPEI	IN-G-01CD	D	Lower than bachelor degree
GEORGIA	IN-G-01CD	D	Professional or college degree
GERMANY	IN-G-01CD	D	Other degrees such as training qualification, completion of degree at university of applied science or lower
MALAYSIA	IN-G-01CD	D	Other credentials at Diploma or less
NORWAY	IN-G-01CD	D	Tertiary practical / technical occupation
OMAN	IN-G-01CD	D	Tertiary practical / technical / occupation or post secondary (not university)
PHILIPPINES	IN-G-01CD	D	Other credentials at Technical / Vocational (non-degree Diploma) or less
POLAND	IN-G-01CA	D	PhD degree
POLAND	IN-G-01CB	D	Master title
POLAND	IN-G-01CC	D	Bachelor, 1st degree studies
POLAND	IN-G-01CD	D	The diploma of completing teachers college or language teachers' college, post-secondary school or lower
RUSSIAN FEDERATION	IN-G-01CD	D	Secondary vocational education or primary vocational education
SINGAPORE	IN-G-01CD	D	Other credentials at Diploma or less
SPAIN	IN-G-01CD	D	Other qualifications (vocational education, Baccalaureate, etc.)
SWITZERLAND	IN-G-01CD	D	Other degrees like preparation for higher technical college, professional schools and high schools or less
THAILAND	IN-G-01CD	D	Bachelor's degree (tertiary practical / Technical)
UNITED STATES	IN-G-01CD	D	Associate's Degree (e.g. A.A., A.S.), Vocational Certificate or less

IN-G-02A-ET**Question:**

Please calculate or estimate the percentages of the full-time staff members with teaching responsibilities in this program who hold the following academic ranks.

Academic rank

- A. Very senior (e.g., <Full Professor>)
- B. Senior (e.g., <Senior Lecturer or Associate Professor>)
- C. Junior (e.g., <Assistant Professor or Lecturer>)
- D. Assistant (e.g., <Tutor/Graduate Assistant/Junior Lecturer>)
- E. Other (please explain below):

Variable Name(s): MIG002A, MIG002B, MIG002C, MIG002D, MIG002ET

Country	Item ID	Code	Documentation
BOTSWANA	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Professor 2 = Associate Professor 3 = Senior Lecturer 4 = Lecturer 5 = Staff Development Fellow
CANADA	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full Professor 2 = Senior Lecturer or Associate Professor 3 = Assistant Professor or Lecturer 4 = Tutor / Graduate Assistant / Junior Lecturer 5 = Other (please explain below)
CHILE	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full professor 2 = Associate professor 3 = Assistant professor 4 = Tutor / Graduate assistant 5 = Other (please explain below)
CHINESE TAIPEI	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Professor 2 = Associate Professor 3 = Assistant Professor or Lecturer 4 = Teaching assistant or assistant 5 = Other (please explain below)
GEORGIA	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full professor 2 = Associate professor 3 = Assistant professor 4 = Assistant / junior lector 5 = Other (please explain below)
GERMANY	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Professor 2 = Senior lecturer or associate professor 3 = Lecturer 4 = Assistant professor / junior lecturer 5 = Other (please explain below)
MALAYSIA	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Very senior (e.g., Professor) 2 = Senior (e.g., Associate Professor / Senior Lecturer) 3 = Junior (e.g., Lecturer) 4 = Assistant (e.g., Tutor) 5 = Other (please explain below)

Country	Item ID	Code	Documentation
NORWAY	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full professor or similar 2 = Associate professor / Senior lecturer 3 = Assistant professor / Lecturer 4 = Junior lecturer 5 = Other (explain below)
OMAN	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full Professor 2 = Senior Lecturer or Associate Professor 3 = Assistant Professor or Lecturer 4 = Tutor / Graduate Assistant / Junior Lecturer 5 = Other (please explain below)
PHILIPPINES	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full professor 2 = Associate professor 3 = Assistant professor 4 = Instructor / lecturer 5 = Other (please explain below)
POLAND	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Professor 2 = Habilitated doctor 3 = Doctor 4 = Master 5 = Other (Please explain below)
RUSSIAN FEDERATION	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Professor 2 = Docent 3 = Senior Educator 4 = Assistant 5 = Other (please explain below)
SINGAPORE	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Professor 2 = Associate Professor 3 = Assistant Professor or Lecturer 4 = Teaching Fellow 5 = Other (please explain below)
SPAIN	IN-G-02A-02E	D	Nationally defined dimensions: 1 = University professor 2 = Tenured lecturer / university school professor / non-tenured PhD lecturer 3 = PhD assistant lecturer 4 = Tenured university school lecturer / non-tenured lecturer / assistant lecturer / associate lecturer 5 = Other (please explain below)
SWITZERLAND	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Ordinary professorship (with resulted postdoctoral lecture qualification or equal qualification assignment) 2 = Universities: Senior assistant lecturer / teacher training colleges: professors with doctorate but without postdoctoral lecture qualification 3 = Scientific assistants and instructors with doctorate 4 = Graduate assistants respectively instructors without doctorate 5 = Other (please explain below)
THAILAND	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Very senior (e.g., Professor) 2 = Senior (e.g., Associate Professor) 3 = Junior (e.g., Assistant Professor) 4 = Assistant (e.g., Lecturer) 5 = Other (please explain below)

Country	Item ID	Code	Documentation
UNITED STATES	IN-G-02A-02E	D	Nationally defined dimensions: 1 = Full Professor 2 = Senior Lecturer or Associate Professor 3 = Assistant Professor or Lecturer 4 = Tutor / Graduate Assistant / Junior Lecturer 5 = Other (please explain below)

IN-G-03**Question:**

Please indicate whether staff employed by your institution to teach mathematics or mathematics related content to <future teachers> in this program would normally be required to have:

A. Mark this box if you do not have information to answer Question 3.

Variable Name(s): MIG003

Country	Item ID	Code	Documentation
GERMANY	IN-G-03	D	Stem of the question changed: Please indicate which of the following qualifications staff employed by the universities of your state to teach mathematics to future teachers in this program would normally be required to have

IN-G-03A-G**Question:**

Please indicate whether staff employed by your institution to teach mathematics or mathematics related content to <future teachers> in this program would normally be required to have:

A. <ISCED level 5B>

B. <ISCED level 5, 1st degree>

C. <ISCED level 5, 2nd degree>

D. <ISCED level 6>

E. A teaching qualification for <primary> or <secondary> school

F. Experience teaching in <primary> or <secondary> school(s)

G. A current cross-appointment in a school

1 = Yes

2 = No

Variable Name(s): MIG003A, MIG003B, MIG003C, MIG003D, MIG003E, MIG003F, MIG003G

Country	Item ID	Code	Documentation
BOTSWANA	IN-G-03A	X	Dimension not administered or data not available
BOTSWANA	IN-G-03C	D	Masters
PHILIPPINES	IN-G-03A	D	Technical / Vocational (Non-degree Diploma)

IN-G-04A-G**Question:**

Please indicate whether staff employed by your institution to teach mathematics <pedagogy> to <future teachers> in this program would normally be required to have:

- A. <ISCED level 5B>
 - B. <ISCED level 5, 1st degree>
 - C. <ISCED level 5, 2nd degree>
 - D. <ISCED level 6>
 - E. A teaching qualification for <primary> or <secondary> school
 - F. Experience teaching in <primary> or <secondary> school(s)
 - G. A current cross-appointment in a school
- 1 = Yes
2 = No

Variable Name(s): MIG004A, MIG004B, MIG004C, MIG004D, MIG004E, MIG004F, MIG004G

Country	Item ID	Code	Documentation
BOTSWANA	IN-G-04A	X	Dimension not administered or data not available
BOTSWANA	IN-G-04C	D	Masters

IN-G-05A-G**Question:**

Please indicate whether staff employed by your institution to <supervise/mentor/instruct> in extended teaching practice are normally required to have:

- A. <ISCED level 5B>
 - B. <ISCED level 5, 1st degree>
 - C. <ISCED level 5, 2nd degree>
 - D. <ISCED level 6>
 - E. A teaching qualification for <primary> or <secondary> school
 - F. Experience teaching in <primary> or <secondary> school(s)
 - G. A current cross-appointment in a school
- 1 = Yes
2 = No

Variable Name(s): MIG005A, MIG005B, MIG005C, MIG005D, MIG005E, MIG005F, MIG005G

Country	Item ID	Code	Documentation
BOTSWANA	IN-G-05A	X	Dimension not administered or data not available
BOTSWANA	IN-G-05C	D	Masters
POLAND	IN-G-05A-05G	D	Taking care of students
SPAIN	IN-G-05A-05G	D	Supervise / tutor / teach

IN-H-03A-B**Question:**

A. Are <future teachers> given direct subsidies for living expenses?

1 = Yes

2 = No

B. If yes, how much is the total budget for <future teacher> subsidies?

<country currency>

Variable Name(s): MIH003A, MIH003B

Country	Item ID	Code	Documentation
CHINESE TAIPEI	IN-H-03A	D	Stem of the question changed: Are pre-service teachers taking this program (including the practicum) given direct subsidies for living expenses?
NORWAY	IN-H-03A-03B	X	Question not administered or data not available

COUNTRY CURRENCY
Question(s):

MIH001A, MIH001B, MIH002, MIH003B

International Term: COUNTRY CURRENCY

Country	Item ID	Code	Documentation
BOTSWANA	COUNTRY CURRENCY	D	Pula
CANADA	COUNTRY CURRENCY	D	Canadian dollars
CHILE	COUNTRY CURRENCY	D	Pesos
CHINESE TAIPEI	COUNTRY CURRENCY	D	NT dollars
GEORGIA	COUNTRY CURRENCY	D	Lari
GERMANY	COUNTRY CURRENCY	D	Euro
MALAYSIA	COUNTRY CURRENCY	D	Ringgit Malaysia
NORWAY	COUNTRY CURRENCY	D	Kr (NOK)
OMAN	COUNTRY CURRENCY	D	Omani Rial
PHILIPPINES	COUNTRY CURRENCY	D	Pesos
POLAND	COUNTRY CURRENCY	D	Zl (zloty)
RUSSIAN FEDERATION	COUNTRY CURRENCY	D	Rubles
SINGAPORE	COUNTRY CURRENCY	D	Dollars
SPAIN	COUNTRY CURRENCY	D	Euros
SWITZERLAND	COUNTRY CURRENCY	D	Swiss Francs
THAILAND	COUNTRY CURRENCY	D	Baht
UNITED STATES	COUNTRY CURRENCY	D	Dollars

COURSE

Question(s):

MIB001B, MID003A, MID004A, MID005A, MID006, MID006A, MID006B, MID007A,
MID008A, MID009**International Term:** COURSE

Country	Item ID	Code	Documentation
BOTSWANA	COURSE	D	Course
CANADA	COURSE	D	Course
CHILE	COURSE	D	Course
CHINESE TAIPEI	COURSE	D	Course / curriculum / university curriculum
GEORGIA	COURSE	D	Course
GERMANY	COURSE	D	Course / vocational training course / seminar
MALAYSIA	COURSE	D	Course
NORWAY	COURSE	D	Study unit / course
OMAN	COURSE	D	Course
PHILIPPINES	COURSE	D	Course
POLAND	COURSE	D	Didactic course / courses
RUSSIAN FEDERATION	COURSE	D	Course
SINGAPORE	COURSE	D	Course
SPAIN	COURSE	D	Subject
SWITZERLAND	COURSE	D	Course
THAILAND	COURSE	D	Course
UNITED STATES	COURSE	D	Course

FUTURE TEACHER

Question(s):

[various]

International Term: FUTURE TEACHER

Country	Item ID	Code	Documentation
BOTSWANA	FUTURE TEACHER	D	Future teacher
CANADA	FUTURE TEACHER	D	Future teacher
CHILE	FUTURE TEACHER	D	Future teacher / students
CHINESE TAIPEI	FUTURE TEACHER	D	Pre-service teacher / student / future teacher / mathematics pre-service teacher / student of teacher preparation
GEORGIA	FUTURE TEACHER	D	Candidate / student / future teacher
GERMANY	FUTURE TEACHER	D	Future teacher / applicant / participant / Student
MALAYSIA	FUTURE TEACHER	D	Student teacher
NORWAY	FUTURE TEACHER	D	Student / Future teacher
OMAN	FUTURE TEACHER	D	Future teacher
PHILIPPINES	FUTURE TEACHER	D	Future teacher / student teacher
POLAND	FUTURE TEACHER	D	Students / teacher specialty students
RUSSIAN FEDERATION	FUTURE TEACHER	D	Future teacher
SINGAPORE	FUTURE TEACHER	D	Student teacher
SPAIN	FUTURE TEACHER	D	Future teacher
SWITZERLAND	FUTURE TEACHER	D	Future teacher
THAILAND	FUTURE TEACHER	D	Future teacher
UNITED STATES	FUTURE TEACHER	D	Future teacher

PEDAGOGICAL

Question(s):

[various]

International Term: PEDAGOGICAL

Country	Item ID	Code	Documentation
BOTSWANA	PEDAGOGICAL	D	Pedagogical
CANADA	PEDAGOGICAL	D	Pedagogical
CHILE	PEDAGOGICAL	D	Pedagogical
CHINESE TAIPEI	PEDAGOGICAL	D	Pedagogical
GEORGIA	PEDAGOGICAL	D	Pedagogical
GERMANY	PEDAGOGICAL	D	Pedagogical / educational
MALAYSIA	PEDAGOGICAL	D	Pedagogical
NORWAY	PEDAGOGICAL	D	Pedagogical
OMAN	PEDAGOGICAL	D	Pedagogical
PHILIPPINES	PEDAGOGICAL	D	Pedagogical
POLAND	PEDAGOGICAL	D	Didactical
RUSSIAN FEDERATION	PEDAGOGICAL	D	Pedagogical
SINGAPORE	PEDAGOGICAL	D	Pedagogical
SPAIN	PEDAGOGICAL	D	Pedagogical
SWITZERLAND	PEDAGOGICAL	D	Pedagogical
THAILAND	PEDAGOGICAL	D	Pedagogical
UNITED STATES	PEDAGOGICAL	D	Pedagogical

PEDAGOGY

Question(s):

[various]

International Term: PEDAGOGY

Country	Item ID	Code	Documentation
BOTSWANA	PEDAGOGY	D	Pedagogy
CANADA	PEDAGOGY	D	Pedagogy
CHILE	PEDAGOGY	D	Pedagogy / didactics
CHINESE TAIPEI	PEDAGOGY	D	Pedagogy / teaching methods / methods in education / materials and methods of teaching
GEORGIA	PEDAGOGY	D	Pedagogy
GERMANY	PEDAGOGY	D	Didactics
MALAYSIA	PEDAGOGY	D	Pedagogy
NORWAY	PEDAGOGY	D	Pedagogy
OMAN	PEDAGOGY	D	Pedagogy
PHILIPPINES	PEDAGOGY	D	Pedagogy
POLAND	PEDAGOGY	D	Didactics
RUSSIAN FEDERATION	PEDAGOGY	D	Methods of teaching / pedagogy
SINGAPORE	PEDAGOGY	D	Pedagogy
SPAIN	PEDAGOGY	D	Didactics / pedagogy
SWITZERLAND	PEDAGOGY	D	Pedagogy / didactics
THAILAND	PEDAGOGY	D	Pedagogy
UNITED STATES	PEDAGOGY	D	Pedagogy (Institutional Program Questionnaire) / Education (Educator Questionnaire)

PRIMARY**Question(s):**

[various]

International Term: PRIMARY

Country	Item ID	Code	Documentation
BOTSWANA	PRIMARY	D	Primary
CANADA	PRIMARY	D	Primary
CHILE	PRIMARY	D	Basic
CHINESE TAIPEI	PRIMARY	D	Primary
GEORGIA	PRIMARY	D	Primary
GERMANY	PRIMARY	D	Primary level
MALAYSIA	PRIMARY	D	Primary
NORWAY	PRIMARY	D	Primary
OMAN	PRIMARY	D	Primary
PHILIPPINES	PRIMARY	D	Elementary
POLAND	PRIMARY	D	Primary
RUSSIAN FEDERATION	PRIMARY	D	Primary (1-4 grades)
SINGAPORE	PRIMARY	D	Primary
SPAIN	PRIMARY	D	Primary
SWITZERLAND	PRIMARY	D	Primary
THAILAND	PRIMARY	D	Primary
UNITED STATES	PRIMARY	D	Elementary

SECONDARY**Question(s):**

[various]

International Term: SECONDARY

Country	Item ID	Code	Documentation
BOTSWANA	SECONDARY	D	Secondary
CANADA	SECONDARY	D	Secondary
CHILE	SECONDARY	D	Middle education
CHINESE TAIPEI	SECONDARY	D	Secondary / senior high school
GEORGIA	SECONDARY	D	Secondary / basic
GERMANY	SECONDARY	D	Secondary level
MALAYSIA	SECONDARY	D	Secondary
NORWAY	SECONDARY	D	Upper secondary school
OMAN	SECONDARY	D	Secondary
PHILIPPINES	SECONDARY	D	Secondary
POLAND	SECONDARY	D	Lower and upper secondary schools
RUSSIAN FEDERATION	SECONDARY	D	Secondary (5-11 grades)
SINGAPORE	SECONDARY	D	Secondary
SPAIN	SECONDARY	D	Secondary
SWITZERLAND	SECONDARY	D	Secondary
THAILAND	SECONDARY	D	Secondary
UNITED STATES	SECONDARY	D	Middle / High school

UNIVERSITY / COLLEGE**Question(s):**

MIE010

International Term: UNIVERSITY / COLLEGE

Country	Item ID	Code	Documentation
BOTSWANA	UNIVERSITY / COLLEGE	D	University / college
CANADA	UNIVERSITY / COLLEGE	D	University / college
CHILE	UNIVERSITY / COLLEGE	D	University / Institute
CHINESE TAIPEI	UNIVERSITY / COLLEGE	D	The teacher preparation institution in university / university
GEORGIA	UNIVERSITY / COLLEGE	D	University / college
GERMANY	UNIVERSITY / COLLEGE	D	University / seminar
MALAYSIA	UNIVERSITY / COLLEGE	D	University / college
NORWAY	UNIVERSITY / COLLEGE	D	University level / teacher education institution
OMAN	UNIVERSITY / COLLEGE	D	University / college
PHILIPPINES	UNIVERSITY / COLLEGE	D	University / college
POLAND	UNIVERSITY / COLLEGE	D	University / college
RUSSIAN FEDERATION	UNIVERSITY / COLLEGE	D	Higher educational institution
SINGAPORE	UNIVERSITY / COLLEGE	D	NIE / University
SPAIN	UNIVERSITY / COLLEGE	D	University / faculty
SWITZERLAND	UNIVERSITY / COLLEGE	D	University / college of higher education
THAILAND	UNIVERSITY / COLLEGE	D	University
UNITED STATES	UNIVERSITY / COLLEGE	D	University / College

Section 2 – TEDS-M 2008 Educator Questionnaire

DEG-A-01-01T

Question:

Which one of the following best describes your current academic rank at your <college/university/institution>?
 1 = <Professor>
 2 = <Associate Professor>
 3 = <Assistant Professor/Senior Lecturer>
 4 = <Lecturer>
 5 = <Instructor/tutor>
 6 = Not Applicable: No ranks designated at this <college/university/institution> for my position
 7 = Other (Please specify):

Variable Name(s): MEA001, MEA001T

Country	Item ID	Code	Documentation
BOTSWANA	DEG-A-01	D	Nationally defined categories: 1 = Professor 2 = Associate Professor 3 = Senior Lecturer 4 = Lecturer 5 = Staff Development Fellow 6 = Not Applicable: No ranks designated at this college / university / institution for my position 7 = Other (Please specify)
CHILE	DEG-A-01	D	Nationally defined categories: 1 = Professor 2 = Associate or adjunct Professor 3 = Assistant Professor 4 = Instructor 5 = Assistant 6 = Not Applicable: No ranks designated at this institution for my position 7 = Other (Please specify)
CHINESE TAIPEI	DEG-A-01	D	Stem of the question changed: Which one of the following best describes your current academic rank? National categories recoded to fit international categories: 1 = Professor / Part-time professor 2 = Associate Professor / Part-time associate professor 3 = Assistant Professor / Part-time assistant professor 4 = Lecturer / Part-time lecturer 5 = Category not administered or data not available 6 = Category not administered or data not available 7 = Other
GEORGIA	DEG-A-01	D	Institute Nationally defined categories: 1 = Professor 2 = Associate professor 3 = Head lecturer 4 = Lecturer 5 = Instructor 6 = Not Applicable: No ranks designated at this institute for my position 7 = Other (Please specify)

Country	Item ID	Code	Documentation
GERMANY	DEG-A-01	D	<p>University / seminar</p> <p>National categories recoded to fit international categories: 1 = Professor 2 = Associate professor 3 = Assistant professor, senior lecturer 4 = Lecturer 5 = Course in general pedagogy educator / Mathematics pedagogy educator 6 = None of these ranks designated for my position 7 = Other (please specify)</p>
NORWAY	DEG-A-01	D	<p>Nationally defined categories: 1 = Full professor or similar 2 = Associate professor / senior lecturer 3 = Assistant professor / lecturer 4 = Junior lecturer 5 = Supervising / mentoring teacher 6 = No suitable rank description 7 = Other (specify)</p>
OMAN	DEG-A-01	D	<p>Nationally defined categories: 1 = Professor 2 = Associate Professor 3 = Assistant Professor / Senior Lecturer 4 = Lecturer 5 = Instructor / tutor 6 = Not Applicable: No ranks designated at this college / university / institution for my position 7 = Other (Please specify)</p>
PHILIPPINES	DEG-A-01	D	<p>Nationally defined categories: 1 = Professor 2 = Associate professor 3 = Assistant professor 4 = Lecturer 5 = Instructor 6 = Not Applicable: No ranks designated at this college / university / institution for my position 7 = Other (Please specify)</p>
POLAND	DEG-A-01	D	<p>National categories recoded to fit international categories: 1 = Professor 2 = Post-doctoral position 3 = Assistant professor 4 = Lecturer / senior lecturer 5 = Instructor / tutor 6 = Not applicable 7 = Other / Doctoral student</p>
RUSSIAN FEDERATION	DEG-A-01	D	<p>National categories recoded to fit international categories: 1 = Professor 2 = Docent 3 = Senior Educator 4 = Assistant 5 = Category not administered or data not available 6 = Not Applicable: No ranks designated at this educational institution for my position 7 = Other (Please specify)</p>
SINGAPORE	DEG-A-01	D	<p>Nationally defined categories: 1 = Professor 2 = Associate professor 3 = Assistant professor / senior lecturer 4 = Lecturer 5 = Teaching fellow 6 = Not applicable: No ranks designated at NIE for my position 7 = Other (Please specify)</p>

Country	Item ID	Code	Documentation
SPAIN	DEG-A-01	D	<p>University school / university / institution</p> <p>Nationally defined categories: 1 = University professor 2 = Tenured lecturer/ university school professor/ non-tenured PhD lecturer 3 = PhD assistant lecturer 4 = Tenured university school lecturer / non-tenured associate lecturer 5 = Assistant lecturer / associate lecturer 6 = Not Applicable: No ranks designated at this university school / university / institution for my position 7 = Other (Please specify)</p>
SWITZERLAND	DEG-A-01	D	<p>Nationally defined categories: 1 = Ordinary professorship (with resulted postdoctoral lecture qualification or an equal qualification assignment) 2 = University: higher assistant Universities of teacher education: professor with a doctorate but without postdoctoral lecture qualification 3 = Research/scientific assistant with a doctorate 4 = Assistant with a diploma respectively a lecturer with licentiate or Master 5 = Course instructor, tutor 6 = None of these descriptions fits my position at the University / higher school of Education 7 = Other (Please specify):</p>
THAILAND	DEG-A-01	D	<p>Nationally defined categories: 1 = Professor 2 = Associate Professor 3 = Assistant Professor 4 = Lecturer 5 = Part-time Lecturer 6 = Not Applicable: No ranks designated at this university for my position 7 = Other (Please specify)</p>

DEG-A-03A-E**Question:**

What is the highest degree you have earned in each of the following areas?

- A. Mathematics
 - B. Mathematics Education
 - C. Education
 - D. Other mathematics related discipline or field
 - E. Other discipline or field
- 1 = <Non-university, tertiary level> (e.g., Specialist Certificate) <ISCED 5B>
 2 = <First university> degree (e.g., Undergraduate or Bachelors) <ISCED 5A> First degree
 3 = <Masters level> degree (also post -graduate diploma) <ISCED 5A> Second degree
 4 = <Doctorate level> degree or higher <ISCED 6>
 5 = No degree in this field

Variable Name(s): MEA003A, MEA003B, MEA003C, MEA003D, MEA003E

Country	Item ID	Code	Documentation
BOTSWANA	DEG-A-03A-03E	D	National categories recoded to fit international categories: 1 = Non-university, tertiary level (e.g., Specialist Certificate), 1st Degree + Masters 2 = First university degree (e.g., Undergraduate or Bachelors), First degree 3 = Masters level degree (also post-graduate diploma), Masters degree 4 = Doctorate level degree or higher, Doctorate Degree 5 = No degree in this field
CHILE	DEG-A-03A-03E	D	Nationally defined categories: 1 = Non-university, tertiary level (e.g., Specialist Certificate) 2 = Licentiate or Bachelors degree 3 = Masters degree 4 = Doctorate level or higher 5 = No degree in this field
GERMANY	DEG-A-03A-03E	D	National categories recoded to fit international categories: 1 = Non-university, tertiary level (e.g. professional school) 2 = Degree at university of applied sciences / university degree (e.g. graduate degree / diploma / 1st state examination / Master) 3 = 2nd state examination 4 = Promotion, conferral of a doctorate / postdoctoral lecture qualification 5 = No degree in this field
POLAND	DEG-A-03A-03E	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = Bachelor's degree studies or engineering 3 = Master degree 4 = PhD degree, post-doctoral degree, professor 5 = No title in this area
SINGAPORE	DEG-A-03A-03E	D	Nationally defined categories: 1 = Diploma or specialist certificate 2 = University (first degree) 3 = Masters' degree also post-graduate diploma 4 = Doctorate degree or higher 5 = No degree in this field
SPAIN	DEG-A-03A-03E	D	Nationally defined categories: 1 = Non-university qualification 2 = University diploma holder 3 = Graduate / Master's degree 4 = Doctorate or higher 5 = No degree in this field

Country	Item ID	Code	Documentation
SWITZERLAND	DEG-A-03A-03E	D	National categories recoded to fit international categories: 1 = Non-university, tertiary level / area (e.g. technical college, teacher training college, teacher training college for basic levels) 2 = Graduate degree (e.g. Bachelor, teacher training college for expanded levels non-university or a university of teacher education) 3 = University degree (Master, Licentiate) 4 = Promotion / Postdoctoral lecture qualification 5 = No degree in this field
UNITED STATES	DEG-A-03A-03E	D	Nationally defined categories: 1 = Associate's Degree vocational or technical program (e.g., A.A., A.S.) 2 = Bachelor's Degree (e.g. B.A., B.S.) 3 = Masters or Professional Degree (e.g. M.A., M.S., M.D., J.D., D.O., D.V.M., etc.) 4 = Doctorate level degree or higher (e.g. Ph.D.) 5 = No degree in this field

DEG-A-04
Question:

Do you consider yourself a mathematics specialist?
 1 = Yes, mathematics is my main specialty
 2 = Yes, mathematics is one of two or more subjects about which I am especially knowledgeable
 3 = No, but mathematics is particular interest of mine
 4 = No

Variable Name(s): MEA004

Country	Item ID	Code	Documentation
POLAND	DEG-A-04	D	2 = Yes, mathematics is one of the subjects about which I am especially knowledgeable

DEG-A-05**Question:**

Do you currently hold, or have you ever held, a <teaching certificate, license or registration> to teach <primary and/or secondary> grades?

1 = Yes, I currently hold a <teaching certificate/license/registration>

2 = Yes, I had a <certificate/license/registration>, which has expired

3 = No, I have never held a <certificate/license/registration>

Variable Name(s): MEA005

Country	Item ID	Code	Documentation
CHILE	DEG-A-05	D	<p>Stem of the question changed: Do you currently hold a certificate that qualifies you to teach basic or middle education?</p> <p>Nationally defined categories: 1 = Yes, I currently hold a teaching qualification. 2 = Yes, I had a qualification, which has expired 3 = No, I have never held a qualification to teach</p>
GEORGIA	DEG-A-05	D	<p>Stem of the question changed: Do you currently hold, or have you ever held, a teaching certificate of higher educational appropriate diploma to teach primary and/or secondary grades?</p> <p>Nationally defined categories: 1 = Yes, I currently hold a certificate / diploma 2 = Yes, I had a certificate / diploma, which has expired 3 = No, I have never held a certificate / diploma</p>
GERMANY	DEG-A-05	D	<p>Stem of the question changed: Do you hold a teaching permission / teaching licence (2nd state examination) to teach primary or secondary level students?</p> <p>National categories recoded to fit international categories: 1 = Yes, I hold a teaching permission / teaching licence 2 = Category not administered or data not available 3 = No, I have never held a teaching permission / teaching licence</p>
NORWAY	DEG-A-05	D	Formal competence
POLAND	DEG-A-05	D	<p>Stem of the question changed: Do you currently hold, or have you ever held, a formal title to teach primary and secondary schools (gymnasia and upper secondary schools)?</p> <p>Nationally defined categories: 1 = Yes, I currently hold an entitlement 2 = Yes, I had an entitlement, which has expired 3 = No, I have never held an entitlement</p>
RUSSIAN FEDERATION	DEG-A-05	D	<p>Stem of the question changed: Do you currently hold a teaching certificate to teach primary (1-4 grades) and / or secondary (5-11 grades)?</p> <p>National categories recoded to fit international categories: 1 = Yes, I currently hold a teaching certificate 2 = Category not administered or data not available 3 = No, I have never held a certificate</p>
SPAIN	DEG-A-05	D	Certificate, license / qualification

Country	Item ID	Code	Documentation
SWITZERLAND	DEG-A-05	D	National categories recoded to fit international categories: 1 = I have a teaching certificate for the primary level / I have a teaching certificate for the lower secondary level / I have a teaching certificate for the upper secondary level 2 = Category not administered or data not available 3 = I never had a teaching certificate

DEG-A-06**Question:**

Do you currently hold a teaching position in a <primary or secondary> school in addition to your current position in this institution?

1 = Yes
2 = No

Variable Name(s): MEA006

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-A-06	D	Stem of the question changed: Do you currently hold a teaching position in a primary or secondary school in addition to your current position in this university?
POLAND	DEG-A-06	D	Primary and secondary schools (gymnasias and upper secondary schools)

DEG-B-01A-B**Question:**

For how many years have you taught

A. in <primary> schools?
B. in <secondary> schools?

Variable Name(s): MEB001A, MEB001B

Country	Item ID	Code	Documentation
NORWAY	DEG-B-01B	D	Lower and upper secondary level
POLAND	DEG-B-01A-01B	D	Stem of the question changed: For how many years did you teach in primary or secondary school? Nationally defined dimensions: 1 = Primary school (before or after the reform) 2 = In the secondary school (before the reform), lower-secondary school or upper-secondary school (after the reform)
SINGAPORE	DEG-B-01B	D	In secondary schools (up to year 10)
SWITZERLAND	DEG-B-01B	D	On lower secondary level / On upper secondary level
UNITED STATES	DEG-B-01A-01B	D	Stem of the question changed: For how many years have you taught? Write 0 (zero) if none

DEG-B-02A-B**Question:**

If you reported <primary or secondary> teaching experience in question 1, for how many of these years did you teach mathematics

A. in <primary> schools?

B. in <secondary> schools?

Variable Name(s): MEB002A, MEB002B

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-B-02A-02B	D	Primary and secondary
NORWAY	DEG-B-02B	D	Lower and upper secondary level
POLAND	DEG-B-02A-02B	D	Stem of the question changed: For how many years did you teach in primary or secondary mathematics? Nationally defined dimensions: 1 = Primary school (before or after the reform) 2 = In the secondary school (before the reform), lower-secondary school or upper-secondary school (after the reform)
SWITZERLAND	DEG-B-02B	D	Stem of the question changed: If you reported primary or lower secondary teaching experience in question 1, for how many of these years did you teach mathematics On lower secondary level / On upper secondary level
UNITED STATES	DEG-B-02A-02B	D	Stem of the question changed: If you reported elementary, middle, or high school teaching experience in question 1, for how many of these years did you teach mathematics? Write 0 (zero) if none

DEG-B-03**Question:**

For how many years have you been employed, or otherwise professionally engaged, with this <teacher education institution>?

Variable Name(s): MEB003

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-B-03	D	Stem of the question changed: For how many years have you been employed, or otherwise professionally engaged, with universities which have teacher preparation departments or teacher preparation centres?
GEORGIA	DEG-B-03	D	This Institute / university
GERMANY	DEG-B-03	D	University / seminar
POLAND	DEG-B-03	D	This university
RUSSIAN FEDERATION	DEG-B-03	D	Pedagogical education institution
SINGAPORE	DEG-B-03	D	NIE
UNITED STATES	DEG-B-03	D	Stem of the question changed: For how many years have you been employed, or otherwise professionally engaged, with this teacher education institution? Write 0 (zero) if none

DEG-B-04**Question:**

For how many years have you prepared <future teachers> who will teach at each of the following levels?
If you do not know if <future teachers> enroll in your <course>, please check this box and skip to question 5.

Variable Name(s): MEB004

Country	Item ID	Code	Documentation
POLAND	DEG-B-04	X	Question not administered or data not available
RUSSIAN FEDERATION	DEG-B-04	X	Question not administered or data not available

DEG-B-04A-B**Question:**

For how many years have you prepared <future teachers> who will teach at each of the following levels?

A. <Primary> schools

B. <Secondary> schools

Variable Name(s): MEB004A, MEB004B

Country	Item ID	Code	Documentation
NORWAY	DEG-B-04A	D	Primary and lower secondary level
NORWAY	DEG-B-04B	D	Lower and upper secondary level
POLAND	DEG-B-04A-04B	X	Question not administered or data not available
UNITED STATES	DEG-B-04A-04B	D	Stem of the question changed: For how many years have you prepared future teachers who will teach at each of the following levels? Write 0 (zero) if none

DEG-B-06A-C**Question:**

At which of the following levels do you teach <courses> in your institution?

A. <ISCED Level 5A first degree> or undergraduate level

B. <ISCED Level 5A second degree>, postgraduate or masters level

C. <ISCED Level 6>, doctoral (Ph.D. or Ed.D.) level

1 = Yes

2 = No

Variable Name(s): MEB006A, MEB006B, MEB006C

Country	Item ID	Code	Documentation
CANADA	DEG-B-06A-06C	D	Nationally defined dimensions: 1 = First university degree or undergraduate level 2 = Master's level 3 = Doctoral (Ph.D. or Ed.D.) level
CHILE	DEG-B-06A-06C	D	Nationally defined dimensions: 1 = Undergraduate level 2 = Postgraduate or masters level 3 = Doctoral level
GERMANY	DEG-B-06A-06C	D	Nationally defined dimensions: 1 = Basic studies / Foundation course Advanced / Main study period 2 = Second phase of training, practical training 3 = Doctorate education / doctorate schooling
SPAIN	DEG-B-06A-06C	D	Nationally defined dimensions: 1 = Certificate 2 = Graduate degree or engineering 3 = Doctorate or Master's degree (Master's degree didn't exist in Spain during the time of data collection, all responders with code three actually have a Doctor's degree)
SWITZERLAND	DEG-B-06A-06C	D	Nationally defined dimensions: 1 = Bachelor studies at teacher training colleges and technical colleges, Bachelor studies or lower level 2 = University, college of higher education, Master studies in general or Master studies on universities of teacher education 3 = Postgraduate training
UNITED STATES	DEG-B-06A-06C	D	Nationally defined dimensions: 1 = Undergraduate level 2 = Postgraduate or masters level 3 = Doctoral (Ph.D. or Ed.D.) level

DEG-C-02A-C**Question:**

Estimate the total amount of time you have participated as a learner in professional development in each of the following areas during the last 12 months. (Include research seminars, working groups, professional meetings, workshops, and conferences.)

- A. Mathematics
- B. Mathematics <Pedagogy>
- C. General <Pedagogy>
- 1 = None
- 2 = 1-5 hrs
- 3 = 6-15 hrs
- 4 = 16-35 hrs
- 5 = More than 35 hrs

Variable Name(s): MEC002A, MEC002B, MEC002C

Country	Item ID	Code	Documentation
GERMANY	DEG-C-02C	D	Educational science / pedagogy

DEG-D-01A-C**Question:**

Indicate whether you have ever conducted research in each of the following areas:

- A. Research in mathematics
- B. Research in mathematics education or mathematics <pedagogy>
- C. Educational research in areas other than mathematics <pedagogy>
- 1 = Yes
- 2 = No

Variable Name(s): MED001A, MED001B, MED001C

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-D-01B	D	Research in mathematics education
GEORGIA	DEG-D-01C	D	Other spheres

DEG-D-02A-ET**Question:**

In the past 12 months, approximately what percent of your working time was devoted to each of the following types of activities?

- A. Teaching and teaching-related activities
- B. Research and research-related activities
- C. <College/university> administration
- D. <Service> to the profession (e.g. administration, mentoring, officer in a professional organization, advisory boards)
- E. Other (Please specify):

Variable Name(s): MED002A, MED002B, MED002C, MED002D, MED002E, MED002ET

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-D-02D	D	Service to the profession (e.g. mentoring officer, administrator in educational research institution or organization; professional speaks, inspectors)
GEORGIA	DEG-D-02D	D	Development
GERMANY	DEG-D-02D	D	Engagement
MALAYSIA	DEG-D-02C	D	Institution / university
POLAND	DEG-D-02D	D	Service to the academic community (e.g. administration, mentoring, officer in a professional organization, advisory boards)
RUSSIAN FEDERATION	DEG-D-02D	D	Administrative professional activity
SPAIN	DEG-D-02C	D	School / university
SWITZERLAND	DEG-D-02C	D	Educational institution

DEG-E-01A-C**Question:**

When <future teachers> are on <practicum/field experience> please indicate which of the following are part of your role?

- A. To observe them as they teach
 - B. To provide advice and guidance about their teaching
 - C. To assess and/or report on their success in teaching
- 1 = Yes
2 = No

Variable Name(s): MEE001A, MEE001B, MEE001C

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-E-01C	D	To assess the condition about their teaching and / or submit documents about the assessment
GERMANY	DEG-E-01A-01C	D	Practical school-related parts of education
POLAND	DEG-E-01C	D	Assessing students' skills during the field practicum
SWITZERLAND	DEG-E-01A-01C	D	Internship, field experience / at their schools

DEG-E-02**Question:**

How long have you been instructing or supervising <future teachers> during their <practicum/teaching rounds/school experience>?

1 = One year or less

2 = 2-3 years

3 = 4-10 years

4 = More than 10 years

Variable Name(s): MEE002

Country	Item ID	Code	Documentation
BOTSWANA	DEG-E-02	D	Teaching practice / teaching rounds / school experience
CHILE	DEG-E-02	D	Practical experiences in school settings
GERMANY	DEG-E-02	D	School- related practical experience
POLAND	DEG-E-02	D	Professional practice
SWITZERLAND	DEG-E-02	D	Teaching experience

DEG-F-01A-D**Question:**

What level of <future teacher> takes this <course>?
 A. Future <primary> teachers
 B. Future <lower secondary> teachers
 C. Students preparing for careers other than teaching
 D. I do not know the career aspirations of my students
 1 = Yes
 2 = No

Variable Name(s): MEF001A, MEF001B, MEF001C, MEF001D

Country	Item ID	Code	Documentation
BOTSWANA	DEG-F-01B	D	Junior secondary
CHILE	DEG-F-01B	D	Future basic teachers (with specialisation)
CHINESE TAIPEI	DEG-F-01B	D	Junior high
GEORGIA	DEG-F-01B	D	Basic
POLAND	DEG-F-01A	D	Future teachers in primary schools
POLAND	DEG-F-01B	D	Future teachers in lower secondary schools
SINGAPORE	DEG-F-01B	D	Lower secondary / secondary
SPAIN	DEG-F-01B	D	Compulsory secondary
SWITZERLAND	DEG-F-01A-01D	D	Nationally defined dimensions: 1 = Future primary teachers 2 = Future lower secondary teachers 3 = Students preparing for careers other than teaching 4 = I do not know the career aspirations of my students

DEG-F-02**Question:**

Which of the following best describes the main subject of this <course>?
 1 = In this <course> students study mathematics only.
 2 = In this <course> students study mathematics <pedagogy> only.
 3 = In this <course> students study general <pedagogy> only.
 4 = In this <course> students study both mathematics and <pedagogy>.

Variable Name(s): MEF002

Country	Item ID	Code	Documentation
GERMANY	DEG-F-02	D	Educational science / pedagogy If this course includes MATHEMATICS CONTENT or MATHEMATICS DIDACTICS (A, B or D), please respond to PART G If this course includes only GENERAL DIDACTICS (C), skip PART G and continue to PART H

DEG-I-01A-O

Question:

In the <course> you selected above, to what extent are your <future teachers> expected to do each of the following?

- A. Listen to a lecture
 - B. Ask questions during class time
 - C. Participate in a whole class discussion
 - D. Make presentations to the rest of the class
 - E. Teach a class session using methods chosen by the <future teacher>
 - F. Teach a class session using methods demonstrated by the instructor
 - G. Work together in groups during class
 - H. Read about research on mathematics
 - I. Read about research on mathematics education
 - J. Read about research on teaching and learning
 - K. Analyze examples of teaching (e.g., film, video, transcript of lesson)
 - L. Write mathematical proofs
 - M. Solve problems in applied mathematics
 - N. Solve a given mathematics problem using multiple strategies
 - O. Use computers or calculators to solve mathematics problems
- 1 = Never
 2 = Rarely
 3 = Occasionally
 4 = Often

Variable Name(s): MEI001A, MEI001B, MEI001C, MEI001D, MEI001E, MEI001F, MEI001G, MEI001H, MEI001I, MEI001J, MEI001K, MEI001L, MEI001M, MEI001N, MEI001O

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-I-01E	D	Teach a class session using methods chosen by them
GERMANY	DEG-I-01E	D	Teach a class session using own / personal methods

DEG-I-02

Question:

During the <course> you selected earlier, how often do you require your <future teachers> to do each of the following?

Variable Name(s): MEI002

Country	Item ID	Code	Documentation
POLAND	DEG-I-02	D	If the course is not directly related to teaching in schools, please tick this box and do not answer the remaining part of the question

DEG-I-02A-H**Question:**

During the <course> you selected earlier, how often do you require your <future teachers> to do each of the following?

- A. Observe models of the teaching strategies they are learning
- B. Practice theories for teaching subject-matter content they are learning
- C. Complete assessments that show how they had applied ideas they are learning
- D. Receive feedback about how well they had implemented teaching strategies they are learning
- E. Collect and analyze evidence about pupil learning as a result of their teaching methods
- F. Test out findings from educational research about difficulties pupils have in learning
- G. Develop strategies to reflect upon their professional knowledge
- H. Demonstrate that they can apply the teaching methods they are learning

1 = Never

2 = Rarely

3 = Occasionally

4 = Often

Variable Name(s): MEI002A, MEI002B, MEI002C, MEI002D, MEI002E, MEI002F, MEI002G, MEI002H

Country	Item ID	Code	Documentation
NORWAY	DEG-I-02A-02H	D	National categories recoded to fit international categories: 1 = Never 2 = Rarely 3 = Occasionally 4 = Often

DEG-I-03**Question:**

In the <course> you selected, how often do you give your <future teachers> the opportunity to do the following?

Variable Name(s): MEI003

Country	Item ID	Code	Documentation
POLAND	DEG-I-03	D	If the course is not directly related to teaching in schools, please tick this box and do not answer the remaining part of the question

DEG-I-03A-Q**Question:**

In the <course> you selected, how often do you give your <future teachers> the opportunity to do the following?

- A. Accommodate a wide range of abilities in each lesson
 - B. Analyze pupil assessment data to learn how to assess more effectively
 - C. Assess higher-level goals (e.g. problem-solving, critical thinking)
 - D. Assess low-level objectives (factual knowledge, routine procedures and so forth)
 - E. Create learning experiences that make the central concepts of subject matter meaningful to pupils
 - F. Create projects that motivate all pupils to participate
 - G. Deal with learning difficulties so that specific pupil outcomes are accomplished
 - H. Develop games or puzzles that provide instructional activities at a high interest level
 - I. Develop instructional materials that build on pupils' experiences, interests and abilities
 - J. Give useful and timely feedback to pupils about their learning
 - K. Help pupils learn how to assess their own learning
 - L. Locate suitable curriculum materials and teaching resources
 - M. Use assessment to give effective feedback to parents or guardians
 - N. Use assessment to give feedback to pupils about their learning
 - O. Use classroom assessments to guide decisions about what and how to teach
 - P. Use pupils' misconceptions to plan instruction
 - Q. Use standardized assessments to guide decisions about what and how to teach
- 1 = Never
2 = Rarely
3 = Occasionally
4 = Often

Variable Name(s): MEI003A, MEI003B, MEI003C, MEI003D, MEI003E, MEI003F, MEI003G, MEI003H, MEI003I, MEI003J, MEI003K, MEI003L, MEI003M, MEI003N, MEI003O, MEI003P, MEI003Q

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-I-03Q	D	Use standardized test (e.g., basic competence test) to guide decisions about what and how to teach.
NORWAY	DEG-I-03A-03Q	D	Nationally defined categories: 1 = Never 2 = Rarely 3 = Occasionally 4 = Often

DEG-J-01A-F**Question:**

Consider all of the <courses> in the program including subject matter <courses> (e.g., mathematics), mathematics <pedagogy courses>, and general education <pedagogy> <courses>. Please indicate the extent to which you agree or disagree with the following statements.

- A. Each stage of the program seemed to be planned to meet the main needs <future teachers> had at each stage of their preparation.
- B. Later <courses> in the program build on what is taught in earlier <courses> in the program.
- C. The program was organized in a way that covered what <future teachers> needed to learn to become effective teachers.
- D. The <courses> seemed to follow a logical sequence of development in terms of content and topics.
- E. Each of the <courses> was clearly designed to prepare <future teachers> to meet a common set of explicit standard expectations for beginning teachers.
- F. There were clear links between most of the <courses> in the teacher education program.

1 = Disagree

2 = Slightly disagree

3 = Slightly agree

4 = Agree

Variable Name(s): MEJ001A, MEJ001B, MEJ001C, MEJ001D, MEJ001E, MEJ001F

Country	Item ID	Code	Documentation
NORWAY	DEG-J-01A	D	Each stage of the program seems to be well adjusted to the educational levels that come before and after

DEG-K-03A-H**Question:**

To what extent do you agree or disagree with each of the following statements about pupil achievement in <primary/lower secondary> mathematics?

- A. Since older pupils can reason abstractly, the use of hands-on models and other visual aids becomes less necessary.
- B. To be good at mathematics you need to have a kind of "mathematical mind".
- C. Mathematics is a subject in which natural ability matters a lot more than effort.
- D. Only the more able pupils can participate in multi-step problem solving activities.
- E. In general, boys tend to be naturally better at mathematics than girls.
- F. Mathematical ability is something that remains relatively fixed throughout a person's life.
- G. Some people are good at mathematics and some aren't.
- H. Some ethnic groups are better at mathematics than others.

1 = Strongly disagree

2 = Disagree

3 = Slightly disagree

4 = Slightly agree

5 = Agree

6 = Strongly agree

Variable Name(s): MEK003A, MEK003B, MEK003C, MEK003D, MEK003E, MEK003F, MEK003G, MEK003H

Country	Item ID	Code	Documentation
BOTSWANA	DEG-K-03A-03H	D	Primary / junior secondary
CHILE	DEG-K-03A-03H	D	Primary / secondary
CHINESE TAIPEI	DEG-K-03A-03H	D	Primary / junior high school
GEORGIA	DEG-K-03A-03H	D	Primary / basic

DEG-L-01A-M**Question:**

Please indicate the extent to which you think the teacher education program has prepared <future teachers> to do the following when they start their teaching career.

- A. Communicate ideas and information about mathematics clearly to pupils
- B. Establish appropriate learning goals in mathematics for pupils
- C. Set up mathematics learning activities to help pupils achieve learning goals
- D. Use questions to promote higher order thinking in mathematics
- E. Use computers and ICT to aid in teaching mathematics
- F. Challenge pupils to engage in critical thinking about mathematics
- G. Establish a supportive environment for learning mathematics
- H. Use assessment to give effective feedback to pupils about their mathematics learning
- I. Provide parents with useful information about pupils' progress in mathematics
- J. Develop assessment tasks that promote learning in mathematics
- K. Incorporate effective classroom management strategies into mathematics teaching
- L. Have a positive influence on difficult or unmotivated pupils
- M. Work collaboratively with other teachers

1 = Not at all

2 = A minor extent

3 = A moderate extent

4 = A major extent

Variable Name(s): MEL001A, MEL001B, MEL001C, MEL001D, MEL001E, MEL001F, MEL001G, MEL001H, MEL001I, MEL001J, MEL001K, MEL001L, MEL001M

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-L-01A-01M	D	Stem of the question changes: Please indicate the extent to which the teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum) has prepared pre-service teachers to do the following when they start their teaching career.

DEG-L-02**Question:**

Overall, how effective do you believe your pre-service teacher education program was in preparing <future teachers> of mathematics?

1 = Very ineffective

2 = Ineffective

3 = Effective

4 = Very effective

Variable Name(s): MEL002

Country	Item ID	Code	Documentation
CHINESE TAIPEI	DEG-L-02	D	Stem of the question changes: Overall, how effective do you believe your pre-service teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum) was in preparing pre-service teachers of mathematics?
POLAND	DEG-L-02	D	Stem of the question changed: In general, how do you think, how well did your studies prepare students to teach mathematics topics? Nationally defined categories: 1 = Very badly 2 = Badly 3 = Well 4 = Very well

COURSE

Question(s):

[various]

International Term: COURSE

Country	Item ID	Code	Documentation
BOTSWANA	COURSE	D	Course
CANADA	COURSE	D	Course
CHILE	COURSE	D	Course
CHINESE TAIPEI	COURSE	D	Course / curriculum / university curriculum
GEORGIA	COURSE	D	Course
GERMANY	COURSE	D	Course / vocational training course / seminar
MALAYSIA	COURSE	D	Course
NORWAY	COURSE	D	Study unit / course
OMAN	COURSE	D	Course
PHILIPPINES	COURSE	D	Course
POLAND	COURSE	D	Didactic course / courses
RUSSIAN FEDERATION	COURSE	D	Course
SINGAPORE	COURSE	D	Course
SPAIN	COURSE	D	Subject
SWITZERLAND	COURSE	D	Course
THAILAND	COURSE	D	Course
UNITED STATES	COURSE	D	Course

FIELD EXPERIENCE / PRACTICUM**Question(s):**

MEE001, MEE002

International Term: FIELD EXPERIENCE / PRACTICUM

Country	Item ID	Code	Documentation
BOTSWANA	FIELD EXPERIENCE / PRACTICUM	D	Teaching practice / field experience
CANADA	FIELD EXPERIENCE / PRACTICUM	D	Field experience / practicum
CHILE	FIELD EXPERIENCE / PRACTICUM	D	Practicum / field experience / teaching practice
CHINESE TAIPEI	FIELD EXPERIENCE / PRACTICUM	D	Practicum / pedagogical practicum
GEORGIA	FIELD EXPERIENCE / PRACTICUM	D	Practice
GERMANY	FIELD EXPERIENCE / PRACTICUM	D	Second phase of training (practical training)
MALAYSIA	FIELD EXPERIENCE / PRACTICUM	D	Practicum / field experience
NORWAY	FIELD EXPERIENCE / PRACTICUM	D	Practicum
OMAN	FIELD EXPERIENCE / PRACTICUM	D	Field experience
PHILIPPINES	FIELD EXPERIENCE / PRACTICUM	D	Field experience / practicum
POLAND	FIELD EXPERIENCE / PRACTICUM	D	Professional practice
RUSSIAN FEDERATION	FIELD EXPERIENCE / PRACTICUM	D	Pedagogical practice
SINGAPORE	FIELD EXPERIENCE / PRACTICUM	D	Practicum / school experience
SPAIN	FIELD EXPERIENCE / PRACTICUM	D	Field experience / teaching practice
SWITZERLAND	FIELD EXPERIENCE / PRACTICUM	D	Internship / field experience
THAILAND	FIELD EXPERIENCE / PRACTICUM	D	Field experience / practicum
UNITED STATES	FIELD EXPERIENCE / PRACTICUM	D	Field experience

FUTURE TEACHER

Question(s):

[various]

International Term: FUTURE TEACHER

Country	Item ID	Code	Documentation
BOTSWANA	FUTURE TEACHER	D	Future teacher
CANADA	FUTURE TEACHER	D	Future teacher
CHILE	FUTURE TEACHER	D	Future teacher / students
CHINESE TAIPEI	FUTURE TEACHER	D	Pre-service teacher / student / future teacher / mathematics pre-service teacher / student of teacher preparation
GEORGIA	FUTURE TEACHER	D	Candidate / student / future teacher
GERMANY	FUTURE TEACHER	D	Future teacher / applicant / participant / Student
MALAYSIA	FUTURE TEACHER	D	Student teacher
NORWAY	FUTURE TEACHER	D	Student / Future teacher
OMAN	FUTURE TEACHER	D	Future teacher
PHILIPPINES	FUTURE TEACHER	D	Future teacher / student teacher
POLAND	FUTURE TEACHER	D	Students / teacher specialty students
RUSSIAN FEDERATION	FUTURE TEACHER	D	Future teacher
SINGAPORE	FUTURE TEACHER	D	Student teacher
SPAIN	FUTURE TEACHER	D	Future teacher
SWITZERLAND	FUTURE TEACHER	D	Future teacher
THAILAND	FUTURE TEACHER	D	Future teacher
UNITED STATES	FUTURE TEACHER	D	Future teacher

PEDAGOGY

Question(s):

[various]

International Term: PEDAGOGY

Country	Item ID	Code	Documentation
BOTSWANA	PEDAGOGY	D	Pedagogy
CANADA	PEDAGOGY	D	Pedagogy
CHILE	PEDAGOGY	D	Pedagogy / didactics
CHINESE TAIPEI	PEDAGOGY	D	Pedagogy / teaching methods / methods in education / materials and methods of teaching
GEORGIA	PEDAGOGY	D	Pedagogy
GERMANY	PEDAGOGY	D	Didactics
MALAYSIA	PEDAGOGY	D	Pedagogy
NORWAY	PEDAGOGY	D	Pedagogy
OMAN	PEDAGOGY	D	Pedagogy
PHILIPPINES	PEDAGOGY	D	Pedagogy
POLAND	PEDAGOGY	D	Didactics
RUSSIAN FEDERATION	PEDAGOGY	D	Methods of teaching / pedagogy
SINGAPORE	PEDAGOGY	D	Pedagogy
SPAIN	PEDAGOGY	D	Didactics / pedagogy
SWITZERLAND	PEDAGOGY	D	Pedagogy / didactics
THAILAND	PEDAGOGY	D	Pedagogy
UNITED STATES	PEDAGOGY	D	Pedagogy (Institutional Program Questionnaire) / Education (Educator Questionnaire)

PRIMARY**Question(s):**

[various]

International Term: PRIMARY

Country	Item ID	Code	Documentation
BOTSWANA	PRIMARY	D	Primary
CANADA	PRIMARY	D	Primary
CHILE	PRIMARY	D	Basic
CHINESE TAIPEI	PRIMARY	D	Primary
GEORGIA	PRIMARY	D	Primary
GERMANY	PRIMARY	D	Primary level
MALAYSIA	PRIMARY	D	Primary
NORWAY	PRIMARY	D	Primary
OMAN	PRIMARY	D	Primary
PHILIPPINES	PRIMARY	D	Elementary
POLAND	PRIMARY	D	Primary
RUSSIAN FEDERATION	PRIMARY	D	Primary (1-4 grades)
SINGAPORE	PRIMARY	D	Primary
SPAIN	PRIMARY	D	Primary
SWITZERLAND	PRIMARY	D	Primary
THAILAND	PRIMARY	D	Primary
UNITED STATES	PRIMARY	D	Elementary

SECONDARY**Question(s):**

[various]

International Term: SECONDARY

Country	Item ID	Code	Documentation
BOTSWANA	SECONDARY	D	Secondary
CANADA	SECONDARY	D	Secondary
CHILE	SECONDARY	D	Middle education
CHINESE TAIPEI	SECONDARY	D	Secondary / senior high school
GEORGIA	SECONDARY	D	Secondary / basic
GERMANY	SECONDARY	D	Secondary level
MALAYSIA	SECONDARY	D	Secondary
NORWAY	SECONDARY	D	Upper secondary school
OMAN	SECONDARY	D	Secondary
PHILIPPINES	SECONDARY	D	Secondary
POLAND	SECONDARY	D	Lower and upper secondary schools
RUSSIAN FEDERATION	SECONDARY	D	Secondary (5-11 grades)
SINGAPORE	SECONDARY	D	Secondary
SPAIN	SECONDARY	D	Secondary
SWITZERLAND	SECONDARY	D	Secondary
THAILAND	SECONDARY	D	Secondary
UNITED STATES	SECONDARY	D	Middle / High school

UNIVERSITY / COLLEGE**Question:**

MEA001, MED002C

Variable Name(s): UNIVERSITY / COLLEGE

Country	Item ID	Code	Documentation
BOTSWANA	UNIVERSITY / COLLEGE	D	University / college
CANADA	UNIVERSITY / COLLEGE	D	University / college
CHILE	UNIVERSITY / COLLEGE	D	University / Institute
CHINESE TAIPEI	UNIVERSITY / COLLEGE	D	The teacher preparation institution in university / university
GEORGIA	UNIVERSITY / COLLEGE	D	University / college
GERMANY	UNIVERSITY / COLLEGE	D	University / seminar
MALAYSIA	UNIVERSITY / COLLEGE	D	University / college
NORWAY	UNIVERSITY / COLLEGE	D	University level / teacher education institution
OMAN	UNIVERSITY / COLLEGE	D	University / college
PHILIPPINES	UNIVERSITY / COLLEGE	D	University / college
POLAND	UNIVERSITY / COLLEGE	D	University / college
RUSSIAN FEDERATION	UNIVERSITY / COLLEGE	D	Higher educational institution
SINGAPORE	UNIVERSITY / COLLEGE	D	NIE / University
SPAIN	UNIVERSITY / COLLEGE	D	University / faculty
SWITZERLAND	UNIVERSITY / COLLEGE	D	University / college of higher education
THAILAND	UNIVERSITY / COLLEGE	D	University
UNITED STATES	UNIVERSITY / COLLEGE	D	University / College

Section 3 - TEDS-M 2008 Future Teacher Questionnaire (Parts A, B, and D)

PG-A-03

Question:

About how many books are there in your <parents' or guardian's> home? (Do not count magazines, newspapers, or your school books.)

1 = None or few (0-10 books)

2 = Enough to fill one shelf (11-25 books)

3 = Enough to fill one bookcase (26-100 books)

4 = Enough to fill two bookcases (101-200 books)

5 = Enough to fill three or more bookcases (more than 200 books)

Variable Name(s): MFA003

Country	Item ID	Code	Documentation
CHILE	PG-A-03	D	Stem of the question changed: About how many books are there in your mother's (or stepmother or guardian) home? (Do not count magazines, newspapers, or your school books.)
GERMANY	PG-A-03	D	Parents
POLAND	PG-A-03	D	Stem of the question changed: About how many books are there in your parents / legal guardians home? Please do not count magazines, newspapers, or your handbooks There are 11-25 books on the 0.5 meters' long shelf Nationally defined categories: 1 = 0-10 books 2 = 11-25 books 3 = 26-100 books 4 = 101-200 books 5 = More than 200 books
RUSSIAN FEDERATION	PG-A-03	D	Parents or people substituting them

PG-A-04A-K**Question:**

Do you have any of these items at your <parents' or guardian's> home?

- A. Calculator
- B. Computer (excluding TV/video game computers)
- C. Study desk/table for your use
- D. Dictionary
- E. Encyclopedia (as a book or CD)
- F. Playstation, Game Cube, Xbox or other TV/Video game system
- G. DVD player
- H. Three or more cars, small trucks or sport utility vehicles
- I. <Country specific>
- J. <Country specific>
- K. <Country specific>
- 1 = Yes
- 2 = No

Variable Name(s): MFA004A, MFA004B, MFA004C, MFA004D, MFA004E, MFA004F, MFA004G, MFA004H, MFA004I, MFA004J, MFA004K

Country	Item ID	Code	Documentation
BOTSWANA	PG-A-04I	D	Donkey cart, bicycle
BOTSWANA	PG-A-04J	D	Electricity
BOTSWANA	PG-A-04K	D	Water tap
CANADA	PG-A-04I	D	Dishwasher
CANADA	PG-A-04J-04K	X	Dimension not administered or data not available
CHILE	PG-A-04I	D	Bicycle and motorcycle
CHILE	PG-A-04J-04K	X	Dimension not administered or data not available
CHINESE TAIPEI	PG-A-04I-04K	X	Dimension not administered or data not available
GEORGIA	PG-A-04I-04K	X	Dimension not administered or data not available
GERMANY	PG-A-04A-04H	D	Parents
GERMANY	PG-A-04I	D	Parents Classical literature (e.g. Goethe)
GERMANY	PG-A-04J	D	Parents Works of art (e.g. pictures)
GERMANY	PG-A-04K	D	Parents Musical instruments (e.g. piano, violin)
MALAYSIA	PG-A-04I	D	Motorcycle / bicycle
MALAYSIA	PG-A-04J	D	Internet connection
MALAYSIA	PG-A-04K	D	Phone
NORWAY	PG-A-04I	D	Access to Internet

Country	Item ID	Code	Documentation
NORWAY	PG-A-04J	D	Atlas
NORWAY	PG-A-04K	D	Globe
OMAN	PG-A-04I	D	Internet connection
OMAN	PG-A-04J	D	Private room
OMAN	PG-A-04K	D	GSM or phone line
PHILIPPINES	PG-A-04I	D	Jeepney or tricycle
PHILIPPINES	PG-A-04J	D	Educational CDs
PHILIPPINES	PG-A-04K	D	Camera / digicam or cellular phone
POLAND	PG-A-04A-04H	D	Parents / legal guardians
POLAND	PG-A-04I	D	Parents / legal guardians Satellite or cable TV with at least 30 channels
POLAND	PG-A-04J	D	Parents / legal guardians Access to the internet
POLAND	PG-A-04K	D	Parents / legal guardians Books that are useful in your studies
RUSSIAN FEDERATION	PG-A-04A-04H	D	Do you have any of these items at your parent's home or at home of somebody who replaces your parents?
RUSSIAN FEDERATION	PG-A-04I	D	Do you have any of these items at your parent's home or at home of somebody who replaces your parents? Home theatre
RUSSIAN FEDERATION	PG-A-04J	D	Do you have any of these items at your parent's home or at home of somebody who replaces your parents? Dishwasher
RUSSIAN FEDERATION	PG-A-04K	D	Do you have any of these items at your parent's home or at home of somebody who replaces your parents? Personal notebook
SINGAPORE	PG-A-04H	D	Three or more cars, small trucks or sport cars
SINGAPORE	PG-A-04I	D	Xbox
SINGAPORE	PG-A-04J	D	Domestic help (e.g., maid)
SINGAPORE	PG-A-04K	D	Piano, violin or organ
SPAIN	PG-A-04I	D	Individual room for study
SPAIN	PG-A-04J	D	Internet access
SPAIN	PG-A-04K	D	Digital television

Country	Item ID	Code	Documentation
SWITZERLAND	PG-A-04I	D	Classical literature (e.g. Goethe)
SWITZERLAND	PG-A-04J	D	Works of art (e.g. pictures, posters)
SWITZERLAND	PG-A-04K	D	Musical instruments (e.g. piano, violin)
THAILAND	PG-A-04I	D	Electronic dictionary
THAILAND	PG-A-04J	D	Bicycle or motorcycle
THAILAND	PG-A-04K	D	Library
UNITED STATES	PG-A-04I	D	Recreational vehicle(s), e.g., motor home, yacht, etc.
UNITED STATES	PG-A-04J	D	Broadband / high speed internet access
UNITED STATES	PG-A-04K	D	High definition large screen (>36") TV

PG-A-05**Question:**

What is the highest level of education completed by your mother (or stepmother or female guardian)?

- 1 = <ISCED 1> primary
- 2 = <ISCED 2> lower secondary
- 3 = <ISCED 3> upper secondary
- 4 = <ISCED 4B> post-secondary non-tertiary
- 5 = <ISCED 5B> practical training
- 6 = <ISCED 5A> first degree
- 7 = <ISCED 5A> second degree
- 8 = Beyond <ISCED 5A>, first degree
- 9 = I don't know

Variable Name(s): MFA005

Country	Item ID	Code	Documentation
BOTSWANA	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary 2 = Junior secondary 3 = Senior secondary 4 = Vocational and Technical Courses 5 = Technical Degree 6 = Academic Degree 7 = Category not administered or data not available 8 = Masters Programmes / beyond Masters Programmes 9 = I don't know
CANADA	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary level 2 = Lower secondary 3 = Upper secondary 4 = College / CEGEP 5 = Practical training 6 = 1st university degree 7 = Category not administered or data not available 8 = 2nd university degree / beyond second university degree 9 = I don't know
CHILE	PG-A-05	D	National categories recoded to fit international categories: 1 = Incomplete basic education (less than 8 years) 2 = Complete basic education 3 = Middle education 4 = Higher education (non-university) 5 = Technical higher education 6 = Bachelor degree 7 = Category not administered or data not available 8 = Other university degree / post-graduate 9 = I don't know
CHINESE TAIPEI	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary schools 2 = Junior high school 3 = Senior high school or vocational high school 4 = 2-year junior college, 3-year junior college, 5-year junior college, or foundation studies 5 = Category not administered or data not available 6 = Bachelor 7 = Category not administered or data not available 8 = Master / Doctor 9 = I don't know

Country	Item ID	Code	Documentation
GEORGIA	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = Primary (grades 1-6) 2 = Basic (including 9th grade) 3 = Secondary school diploma 4 = Post-secondary, non higher education 5 = Higher professional education 6 = Education (1st Scientific degree) Bachelor's Degree 7 = Category not administered or data not available 8 = Higher education (2nd scientific degree) Master's Degree / higher education (professional research qualification) Doctor's Degree 9 = I don't know</p>
GERMANY	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = No graduation / school leaving certificate, graduation from school for children with special needs / schools for the learning-impaired, graduation from POS (secondary school, GDR standard school up to 10th grade) after 8th grade or graduation from elementary school ('general school', not primary school) 2 = Graduation from secondary general school, graduation from intermediate school or graduation from POS (secondary school, GDR standard school up to 10th grade) after 10th grade 3 = Advanced technical college entrance qualification, vocational diploma, certificate of general higher education entrance qualification (diploma from German secondary school qualifying for university admission or matriculation) 4 = Completion of an apprenticeship, graduation from commercial school or school providing vocational education 5 = Degree of university of applied sciences / degree of vocationally oriented upper secondary school / degree of school of public health / Master or technical school 6 = Degree at university of applied sciences / advanced technical college diploma / degree at university of cooperative education or university degree (graduate degree / Master's degree / diploma / 1st state examination) 7 = Category not administered or data not available 8 = 2nd state examination / Promotion, conferral of a doctorate (doctoral examination), postdoctoral lecture qualification 9 = I don't know</p>
MALAYSIA	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = Primary 2 = Lower secondary 3 = Upper secondary 4 = Form Six, Matriculation 5 = Diploma 6 = 1st degree 7 = Category not administered or data not available 8 = Master degree / Beyond Master degree 9 = I don't know</p>
NORWAY	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = Primary 2 = Lower secondary 3 = Upper secondary 4 = Some education from university or college 5 = Practical / technical vocational education 6 = Lower degree from university or college 7 = Category not administered or data not available 8 = Master degree or higher from university or college / between F and G above 9 = I don't know</p>

Country	Item ID	Code	Documentation
OMAN	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary (first cycle) 2 = Lower secondary (second cycle) 3 = Upper secondary (post-basic education (11, 12)) 4 = Post-secondary non-tertiary (not university) 5 = Tertiary practical / technical / occupation 6 = First university degree 7 = Category not administered or data not available 8 = Second university degree / beyond first university degree 9 = I don't know
PHILIPPINES	PG-A-05	D	National categories recoded to fit international categories: 1 = Elementary 2 = Lower Secondary -1st year -2nd year 3 = Upper Secondary -3rd year -4th year 4 = Post Secondary - non tertiary 5 = Technical / Vocational 6 = Bachelors, first degree 7 = Category not administered or data not available 8 = Masters, second degree / beyond Masters 9 = I don't know
POLAND	PG-A-05	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = Primary / Lower secondary 3 = Basic vocational / Secondary vocational / Upper secondary 4 = Post secondary 5 = Category not administered or data not available 6 = Bachelor 7 = Category not administered or data not available 8 = Master / PhD, Professor 9 = I don't know
RUSSIAN FEDERATION	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary education (finish Grade 4) 2 = Basic education (finish Grade 9) 3 = Secondary general education (finish Grade 11) 4 = Primary vocational education 5 = Secondary vocational education 6 = Higher education, 4 year 7 = Category not administered or data not available 8 = Higher education, 5-6 years / Candidate or Doctor of science (PhD) 9 = I don't know
SINGAPORE	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary 2 = Lower Secondary (up to Secondary 2) 3 = Upper Secondary (N level or O level) 4 = Post-secondary non-tertiary (e.g., JC / Pre-U / ITE / Certificate in Education) 5 = Diploma (e.g., Polytechnic) 6 = University (First degree) 7 = Category not administered or data not available 8 = Postgraduate diploma / beyond University (First degree) (e.g., Masters' degree, EdD or PhD) 9 = I don't know
SPAIN	PG-A-05	D	National categories recoded to fit international categories: 1 = Primary 2 = Compulsory secondary 3 = Baccalaureate 4 = Category not administered or data not available 5 = Vocational education of middle or higher level 6 = Certificate / University diploma degree 7 = Category not administered or data not available 8 = Graduate degree / one level higher than graduate degree 9 = I don't know

Country	Item ID	Code	Documentation
SWITZERLAND	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = Primary</p> <p>2 = Lower secondary</p> <p>3 = Upper secondary level: general qualification for university entrance, specialized middle schools, university-entrance diploma on a subject, completion of a professional basic education (apprenticeship), vocational general qualification for university entrance</p> <p>4 = General qualification for university entrance as continuation education in healthcare (duration: minimum 3 years)</p> <p>5 = Higher technical / professional education (e.g. federal technical license, diploma)</p> <p>6 = Teacher training college, college of higher education</p> <p>7 = Category not administered or data not available</p> <p>8 = Universities (incl. ETH) / Promotion (doctoral examination), postdoctoral lecture qualification</p> <p>9 = I don't know</p>
THAILAND	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = Primary</p> <p>2 = Lower secondary</p> <p>3 = Upper secondary</p> <p>4 = Post-secondary</p> <p>5 = Bachelor degree (tertiary practical / technical)</p> <p>6 = First degree</p> <p>7 = Category not administered or data not available</p> <p>8 = Second degree / beyond first degree</p> <p>9 = I don't know</p>
UNITED STATES	PG-A-05	D	<p>National categories recoded to fit international categories:</p> <p>1 = Grade 6 or below</p> <p>2 = Grade 7-9</p> <p>3 = Grade 10-12</p> <p>4 = Vocational or technical certification program</p> <p>5 = Associate's Degree vocational or technical program</p> <p>6 = Bachelor's Degree (e.g., B.A., B.S.)</p> <p>7 = Category not administered or data not available</p> <p>8 = Master's or professional degree (e.g., M.D., J.D., D.O., D.V.M., etc.) / beyond a Master's or professional degree</p> <p>9 = I don't know</p>

PG-A-06**Question:**

What is the highest level of education completed by your father (or stepfather or male guardian)?

- 1 = <ISCED 1> primary
- 2 = <ISCED 2> lower secondary
- 3 = <ISCED 3> upper secondary
- 4 = <ISCED 4B> post-secondary non-tertiary
- 5 = <ISCED 5B> practical training
- 6 = <ISCED 5A> first degree
- 7 = <ISCED 5A> second degree
- 8 = Beyond <ISCED 5A>, first degree
- 9 = I don't know

Variable Name(s): MFA006

Country	Item ID	Code	Documentation
BOTSWANA	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Junior secondary 3 = Senior secondary 4 = Vocational and Technical Courses 5 = Technical Degree 6 = Academic Degree 7 = Category not administered or data not available 8 = Masters Programmes / beyond Masters Programmes 9 = I don't know
CANADA	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary level 2 = Lower secondary 3 = Upper secondary 4 = College / CEGEP 5 = Practical training 6 = 1st university degree 7 = Category not administered or data not available 8 = 2nd university degree / beyond second university degree 9 = I don't know
CHILE	PG-A-06	D	National categories recoded to fit international categories: 1 = Incomplete basic education (less than 8 years) 2 = Complete basic education 3 = Middle education 4 = Higher education (non-university) 5 = Technical higher education 6 = Bachelor degree 7 = Category not administered or data not available 8 = Other university degree / post-graduate 9 = I don't know
CHINESE TAIPEI	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary schools 2 = Junior high school 3 = Senior high school or vocational high school 4 = 2-year junior college, 3-year junior college, 5-year junior college, or foundation studies 5 = Category not administered or data not available 6 = Bachelor 7 = Category not administered or data not available 8 = Master / Doctor 9 = I don't know

Country	Item ID	Code	Documentation
GEORGIA	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary (grades 1-6) 2 = Basic (including 9th grade) 3 = Secondary school diploma 4 = Post-secondary, non higher education 5 = Higher professional education 6 = Education (First Scientific degree) Bachelor's Degree 7 = Category not administered or data not available 8 = Higher education (2nd scientific degree) Master's Degree / higher education (professional research qualification) Doctor's Degree 9 = I don't know
GERMANY	PG-A-06	D	National categories recoded to fit international categories: 1 = No graduation / school leaving certificate, graduation from school for children with special needs / schools for the learning-impaired, graduation from POS (secondary school, GDR standard school up to 10th grade) after 8th grade or graduation from elementary school ('general school', not primary school) 2 = Graduation from secondary general school, graduation from intermediate school or graduation from POS (secondary school, GDR standard school up to 10th grade) after 10th grade 3 = Advanced technical college entrance qualification, vocational diploma, certificate of general higher education entrance qualification (diploma from German secondary school qualifying for university admission or matriculation) 4 = Completion of an apprenticeship, graduation from commercial school or school providing vocational education 5 = Degree of university of applied sciences / degree of vocationally oriented upper secondary school / degree of school of public health / Master or technical school 6 = Degree at university of applied sciences / advanced technical college diploma / degree at university of cooperative education or university degree (graduate degree / Master's degree / diploma / 1st state examination) 7 = Category not administered or data not available 8 = 2nd state examination / Promotion, conferral of a doctorate (doctoral examination), postdoctoral lecture qualification 9 = I don't know
MALAYSIA	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Lower secondary 3 = Upper secondary 4 = Form Six, Matriculation 5 = Diploma 6 = 1st degree 7 = Category not administered or data not available 8 = Master degree / Beyond Master degree 9 = I don't know
NORWAY	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Lower secondary 3 = Upper secondary 4 = Some education from university or college 5 = Practical / technical vocational education 6 = Lower degree from university or college 7 = Category not administered or data not available 8 = Master degree or higher from university or college / between F and G above 9 = I don't know

Country	Item ID	Code	Documentation
OMAN	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary (first cycle) 2 = Lower secondary (second cycle) 3 = Upper secondary (post-basic education (11, 12)) 4 = Post-secondary non-tertiary (not university) 5 = Tertiary practical / technical / occupation 6 = First university degree 7 = Category not administered or data not available 8 = Second university degree / beyond first university degree 9 = I don't know
PHILIPPINES	PG-A-06	D	National categories recoded to fit international categories: 1 = Elementary 2 = Lower Secondary -1st year -2nd year 3 = Upper Secondary -3rd year -4th year 4 = Post Secondary - non tertiary 5 = Technical / Vocational 6 = Bachelors, first degree 7 = Category not administered or data not available 8 = Masters, second degree / beyond Masters 9 = I don't know
POLAND	PG-A-06	D	National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = Primary / Lower secondary 3 = Basic vocational / Secondary vocational / Upper secondary 4 = Post secondary 5 = Category not administered or data not available 6 = Bachelor 7 = Category not administered or data not available 8 = Master / PhD, Professor 9 = I don't know
RUSSIAN FEDERATION	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary education (finish Grade 4) 2 = Basic education (finish Grade 9) 3 = Secondary general education (finish Grade 11) 4 = Primary vocational education 5 = Secondary vocational education 6 = Higher education, 4 year 7 = Category not administered or data not available 8 = Higher education, 5-6 years / Candidate or Doctor of science (PhD) 9 = I don't know
SINGAPORE	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Lower Secondary (up to Secondary 2) 3 = Upper Secondary (N level or O level) 4 = Post-secondary non-tertiary (e.g., JC / Pre-U / ITE / Certificate in Education) 5 = Diploma (e.g., Polytechnic) 6 = University (First degree) 7 = Category not administered or data not available 8 = Postgraduate diploma / beyond University (First degree) (e.g., Masters' degree, EdD or PhD) 9 = I don't know
SPAIN	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Compulsory secondary 3 = Baccalaureate 4 = Category not administered or data not available 5 = Vocational education of middle or higher level / Vocational education of higher level 6 = Certificate / University diploma degree 7 = Category not administered or data not available 8 = Graduate degree / one level higher than graduate degree 9 = I don't know

Country	Item ID	Code	Documentation
SWITZERLAND	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Lower secondary 3 = Upper secondary level: general qualification for university entrance, specialized middle schools, completion of a professional basic education (apprenticeship), vocational general qualification for university entrance 4 = General qualification for university entrance as continuation education in healthcare (duration: minimum 3 years) 5 = Higher technical / professional education (e.g. federal technical license, diploma) 6 = Teacher training college, college of higher education 7 = Category not administered or data not available 8 = Universities (incl. ETH) / Promotion (doctoral examination), postdoctoral lecture qualification 9 = I don't know
THAILAND	PG-A-06	D	National categories recoded to fit international categories: 1 = Primary 2 = Lower secondary 3 = Upper secondary 4 = Post-secondary 5 = Bachelor degree (tertiary practical / technical) 6 = First degree 7 = Category not administered or data not available 8 = Second degree / beyond first degree 9 = I don't know
UNITED STATES	PG-A-06	D	National categories recoded to fit international categories: 1 = Grade 6 or below 2 = Grade 7-9 3 = Grade 10-12 4 = Vocational or technical certification program 5 = Associate's Degree vocational or technical program 6 = Bachelor's Degree (e.g., B.A., B.S.) 7 = Category not administered or data not available 8 = Master's or professional degree (e.g., M.D., J.D., D.O., D.V.M., etc.) / beyond a Master's or professional degree 9 = I don't know

PG-A-07
Question:

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

- 1 = Always
- 2 = Almost always
- 3 = Sometimes
- 4 = Never

Variable Name(s): MFA007

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-A-07	D	Nationally defined categories: 1 = Always use national language 2 = Almost always use national language 3 = Sometimes use national language 4 = Never use national language
MALAYSIA	PG-A-07	D	Language of survey

PG-A-08A-B**Question:**

a) What was the highest <year/grade> level at which you studied mathematics in <secondary school>?

1 = <Year 12> (Advanced level)

2 = <Year 12>

3 = <Year 11>

4 = <Year 10>

5 = Below <Year 10>

6 = <Country specific>

7 = <Country specific>

b) What is the most advanced mathematics <course> that you took in <secondary school>?

1 = <Country specific>

2 = <Country specific>

3 = <Country specific>

4 = <Country specific>

5 = <Country specific>

6 = <Country specific>

Variable Name(s): MFA008A, MFA008B

Country	Item ID	Code	Documentation
BOTSWANA	PG-A-08A	D	National categories recoded to fit international categories: 1 = Year 12 (Advanced level) 2 = Year 12 3 = Year 11 4 = Year 10 5 = Below Year 10 6 = Category not administered or data not available 7 = Category not administered or data not available
BOTSWANA	PG-A-08B	D	National categories recoded to fit international categories: 1 = Additional mathematics 2 = O level mathematics 3 = A level mathematics 4 = Higher grade mathematics 5 = Category not administered or data not available 6 = Category not administered or data not available
CANADA	PG-A-08A	D	National categories recoded to fit international categories: 1 = Grade 12 / secondary 5 (Advanced level) 2 = Grade 12 / secondary 5 3 = Grade 11 / secondary 4 4 = Grade 10 / secondary 3 5 = Below grade 10 / secondary 3 6 = Category not administered or data not available 7 = Category not administered or data not available
CANADA	PG-A-08B	D	National categories recoded to fit international categories: 1 = Pre-calculus 2 = Applied mathematics 3 = Consumer mathematics 4 = General mathematics 5 = Category not administered or data not available 6 = Category not administered or data not available

Country	Item ID	Code	Documentation
CHILE	PG-A-08A	D	<p>Stem of the question changed: What was the highest level at which you studied mathematics in middle education?</p> <p>National categories recoded to fit international categories: 1 = Fourth middle (Advanced level) 2 = Fourth middle (General level) 3 = Third middle 4 = Second middle 5 = Below second middle 6 = Category not administered or data not available 7 = Category not administered or data not available</p>
CHILE	PG-A-08B	D	<p>National categories recoded to fit international categories: 1 = Infinite processes 2 = Geometrical places; conics 3 = Lineal programming 4 = Logarithmic and exponential functions 5 = Category not administered or data not available 6 = Category not administered or data not available</p>
CHINESE TAIPEI	PG-A-08A	D	<p>Stem of the question changed: What was the highest level at which you studied mathematics in senior high school or vocational high school?</p> <p>National categories recoded to fit international categories: 1 = Year 12 mathematics for science group A 2 = Year 12 mathematics for literature group B 3 = Category not administered or data not available 4 = Category not administered or data not available 5 = Category not administered or data not available 6 = Mathematics A, B, C for vocational high school 7 = Category not administered or data not available</p>
CHINESE TAIPEI	PG-A-08B	X	Question not administered or data not available
GEORGIA	PG-A-08A	D	<p>National categories recoded to fit international categories: 1 = 12 years study (Advanced level) 2 = 12 years study 3 = 11 years study 4 = 10 years study 5 = Below 10 years study 6 = Category not administered or data not available 7 = Category not administered or data not available</p>
GEORGIA	PG-A-08B	D	<p>National categories recoded to fit international categories: 1 = Stereometry 2 = Trigonometry 3 = Logarithmic equations 4 = Quadratic equations 5 = Limits 6 = Category not administered or data not available</p>
GERMANY	PG-A-08A	D	<p>National categories recoded to fit international categories: 1 = Grade 13 2 = Grade 12 3 = Grade 11 4 = Grade 10 5 = Below grade 10 6 = Category not administered or data not available 7 = Category not administered or data not available</p>

Country	Item ID	Code	Documentation
GERMANY	PG-A-08B	D	<p>Stem of the question changed: Did you take a basic course maths or an advanced course maths on secondary level?</p> <p>National categories recoded to fit international categories: 1 = Basic course maths 2 = Advanced course maths 3 = Category not administered or data not available 4 = Category not administered or data not available 5 = Category not administered or data not available 6 = Category not administered or data not available</p>
MALAYSIA	PG-A-08A	D	<p>Nationally defined categories: 1 = Form 6 (Advanced level) 2 = Form 6 3 = Form 5 4 = Form 4 5 = Form 3 6 = Form 2 7 = Form 1</p>
MALAYSIA	PG-A-08B	D	<p>Nationally defined categories: 1 = Mathematics C 2 = Further Mathematics C 3 = Mathematics S 4 = Mathematics T 5 = Further Mathematics T 6 = Additional Mathematics</p>
NORWAY	PG-A-08A	D	<p>National categories recoded to fit international categories: 1 = Grade 13 (3MX / 3MN) 2 = Grade 13 (3MZ / 3MY / 3MS) 3 = Grade 12 4 = Grade 11 5 = Did not complete grade 11 6 = Category not administered or data not available 7 = Category not administered or data not available</p>
NORWAY	PG-A-08B	D	<p>National categories recoded to fit international categories: 1 = 3MX/3MN 2 = 3MZ/3MY/3MS 3 = 2MX/2MN 4 = 2MZ/2MY/2MS 5 = 1MX/1MY/1MA 6 = Category not administered or data not available</p>
OMAN	PG-A-08A	D	<p>National categories recoded to fit international categories: 1 = Category not administered or data not available 2 = Grade 12 3 = Grade 11 4 = Category not administered or data not available 5 = Category not administered or data not available 6 = Second cycle (5-11) 7 = First cycle (1-4)</p>
OMAN	PG-A-08B	D	<p>Nationally defined categories: 1 = Limits and continuity 2 = Derivation 3 = Integration 4 = Conic sections 5 = Space geometry 6 = Arithmetic and geometric series</p>

Country	Item ID	Code	Documentation
PHILIPPINES	PG-A-08A	D	Nationally defined categories: 1 = Year 12 (Advanced level) 2 = Year 12 3 = Year 11 4 = Year 10 5 = Below year 10 6 = Fourth year (Advanced level) 7 = Fourth year
PHILIPPINES	PG-A-08B	D	Nationally defined categories: 1 = Integral calculus 2 = Differential calculus 3 = Analytic geometry 4 = Trigonometry 5 = Advanced algebra 6 = Plane geometry
POLAND	PG-A-08A	D	Stem of the question changed: Did you take in your secondary school an extended course in mathematics (for example in the class with the mathematics-physics or computer science profile etc.)? National categories recoded to fit international categories: 1 = Yes (Advanced Mathematics) 2 = No (Basic Mathematics) 3 = Category not administered or data not available 4 = Category not administered or data not available 5 = Category not administered or data not available 6 = Category not administered or data not available 7 = Category not administered or data not available
POLAND	PG-A-08B	X	Question not administered or data not available
RUSSIAN FEDERATION	PG-A-08A	D	Gang punched to "Year 11"
RUSSIAN FEDERATION	PG-A-08B	D	Stem of the question changed: The study of secondary school mathematics can be based on programs of different levels: basic, intermediate or advanced. What is the most advanced level of the program of mathematics that you took in the secondary school? National categories recoded to fit international categories: 1 = General education program (basic level, 3-4 hours per week) 2 = Program for specialized classes (intermediate level, 5-7 hours per week) 3 = Program for classes with advanced study of mathematic (advanced level, 8 hours per week or more) 4 = Category not administered or data not available 5 = Category not administered or data not available 6 = Category not administered or data not available
SINGAPORE	PG-A-08A	D	What was the highest grade level at which you studied mathematics in secondary school or polytechnic? National categories recoded to fit international categories: 1 = A level Mathematics 2 = Polytechnic Mathematics 3 = AO Mathematics / O level Additional Mathematics 4 = O level Mathematics 5 = N level Mathematics or below 6 = Category not administered or data not available 7 = Category not administered or data not available

Country	Item ID	Code	Documentation
SINGAPORE	PG-A-08B	D	<p>What is the most advanced mathematics course that you took in secondary school or polytechnic?</p> <p>National categories recoded to fit international categories: 1 = A level mathematics 2 = Polytechnic mathematics 3 = AO mathematics / O level additional mathematics 4 = O level mathematics 5 = N level mathematics or below 6 = Category not administered or data not available</p>
SPAIN	PG-A-08A	D	<p>Academic year</p> <p>National categories recoded to fit international categories: 1 = Year 2 of baccalaureate (natural sciences and health sciences / technology options) 2 = Year 2 of baccalaureate (social sciences) 3 = Year 1 of baccalaureate 4 = Year 4 of compulsory secondary education 5 = Lower than year 4 of compulsory secondary education 6 = I did not study compulsory secondary 7 = Category not administered or data not available</p>
SPAIN	PG-A-08B	D	<p>Nationally defined categories: 1 = Mathematics II 2 = Mathematics I 3 = Mathematics applied to social sciences II 4 = Mathematics applied to social sciences I 5 = Mathematics applied to forms 6 = Mathematics (year 4 of compulsory secondary education)</p>
SWITZERLAND	PG-A-08A	D	<p>School year</p> <p>National categories recoded to fit international categories: 1 = Grade 13 2 = Grade 12 3 = Grade 11 4 = Grade 10 5 = Grade 9 6 = Below grade 9 7 = Category not administered or data not available</p>
SWITZERLAND	PG-A-08B	D	<p>Stem of the question changed: Do you have visited a particular advanced course concerning mathematics (e.g. typus C, focus on mathematics) in upper secondary school?</p> <p>National categories recoded to fit international categories: 1 = Advanced course (e.g. typus C, focus on mathematics) 2 = Category not administered or data not available 3 = Category not administered or data not available 4 = Category not administered or data not available 5 = Category not administered or data not available 6 = Category not administered or data not available</p>
THAILAND	PG-A-08A	D	<p>National categories recoded to fit international categories: 1 = Year 6 (Advanced level) 2 = Year 6 3 = Year 5 4 = Year 4 5 = Below year 4 6 = Learn from non-formal education 7 = Category not administered or data not available</p>

Country	Item ID	Code	Documentation
THAILAND	PG-A-08B	D	National categories recoded to fit international categories: 1 = Math 016 year 6 science program 2 = Math 046 year 6 math-language program 3 = Math 012 year 3 semester 2 4 = Math 204 year 2 semester 2 5 = Other, please specify 6 = Category not administered or data not available
UNITED STATES	PG-A-08A	D	Stem of the question changed: What was the highest grade level at which you studied mathematics in high school? Nationally defined categories: 1 = Category not administered or data not available 2 = Grade 12 3 = Grade 11 4 = Grade 10 5 = Below Grade 10 6 = Category not administered or data not available 7 = Category not administered or data not available
UNITED STATES	PG-A-08B	X	Question not administered or data not available

PG-A-09

Question:

In secondary school, what was the usual level of <marks/grades> that you received?
 1 = Always at the top of my year level
 2 = Usually near the top of my year level
 3 = Generally above average for my year level
 4 = Generally about average for my year level
 5 = Generally below average for my year level

Variable Name(s): MFA009

Country	Item ID	Code	Documentation
CHILE	PG-A-09	D	Level of achievement
POLAND	PG-A-09	D	Nationally defined categories: 1 = Always at the top of my class 2 = Usually near the top of my class 3 = Generally above average for my class 4 = Generally about average for my class 5 = Generally below average for my class
UNITED STATES	PG-A-09	D	Stem of the question changed: When you graduated from high school, what was your class rank?

PG-A-10**Question:**

Prior to commencing your teacher education program, did you have another career?
 For the purposes of this question, a career is having a paid job that you regarded as likely to form your life's work.
 1 = Yes
 2 = No

Variable Name(s): MFA010

Country	Item ID	Code	Documentation
POLAND	PG-A-10	D	Stem of question changed: Prior to commencing your teacher education program, did you have another profession?
SINGAPORE	PG-A-10	D	Prior to commencing your teacher education programme, did you have another career? For the purposes of this question, a career is having a paid job that you regarded as likely to form your life's work (exclude private tuition or part-time job at a restaurant or a shop)

PG-A-11A-I**Question:**

To what extent does each of the following identify your reasons for becoming a teacher?
 A. I was always a good student in school.
 B. I am attracted by the availability of teaching positions.
 C. I love mathematics.
 D. I believe I have a talent for teaching.
 E. I like working with young people.
 F. I am attracted by teacher salaries.
 G. I want to have an influence on the next generation.
 H. I see teaching as a challenging job.
 I. I seek the long-term security associated with being a teacher.
 1 = A major reason
 2 = A significant reason
 3 = A minor reason
 4 = Not a reason

Variable Name(s): MFA011A, MFA011B, MFA011C, MFA011D, MFA011E, MFA011F, MFA011G, MFA011H, MFA011I

Country	Item ID	Code	Documentation
SINGAPORE	PG-A-11A-11H	D	Stem of the question changed: To what extent does each of the following identify your reasons for becoming a teacher who can teach mathematics?
SINGAPORE	PG-A-11I	D	Stem of the question changed: To what extent does each of the following identify your reasons for becoming a teacher who can teach mathematics? I seek the long-term security associated with being a teacher who can teach mathematics

PG-A-12A-C**Question:**

Did any of the following circumstances hinder your studies during your teacher preparation program?

A. Had family responsibilities that made it difficult to do my best

B. Had to borrow money

C. Had to work at a job

1 = Yes

2 = No

Variable Name(s): MFA012A, MFA012B, MFA012C

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-A-12A-12C	D	Future Primary Teacher Questionnaire - Stem of the question changed Did any of the following circumstances hinder your studies during your teacher preparation program (including the practicum, the department's curriculum)? Future Secondary Teacher Questionnaire - Stem of the question changed Did any of the following circumstances hinder your studies during your teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum)?

PG-A-13**Question:**

Did any of the following circumstances hinder your studies during your teacher preparation program?

A. Had family responsibilities that made it difficult to do my best

B. Had to borrow money

C. Had to work at a job

1 = Yes

2 = No

Variable Name(s): MFA013

Country	Item ID	Code	Documentation
SINGAPORE	PG-A-13	D	4 = I will probably resign after serving the bond with the Ministry of Education

PG-B-01A-S**Question:**

Consider the following topics in university level mathematics. Please indicate whether you have ever studied each topic.

- A. Foundations of Geometry or Axiomatic Geometry (e.g., Euclidean axioms)
 - B. Analytic/Coordinate Geometry (e.g., equations of lines, curves, conic sections, rigid transformations or isometrics)
 - C. Non-Euclidean Geometry (e.g., geometry on a sphere)
 - D. Differential Geometry (e.g., sets that are manifolds, curvature of curves, and surfaces)
 - E. Topology
 - F. Linear Algebra (e.g., vector spaces, matrices, dimensions, eigenvalues, eigenvectors)
 - G. Set Theory
 - H. Abstract Algebra (e.g., group theory, field theory, ring theory, ideals)
 - I. Number Theory (e.g., divisibility, prime numbers, structuring integers)
 - J. Beginning Calculus Topics (e.g., limits, series, sequences)
 - K. Calculus (e.g., derivatives and integrals)
 - L. Multivariate Calculus (e.g., partial derivatives, multiple integrals)
 - M. Advanced Calculus or Real Analysis or Measure Theory
 - N. Differential Equations (e.g., ordinary differential equations and partial differential equations)
 - O. Theory of Real Functions, Theory of Complex Functions or Functional Analysis
 - P. Discrete Mathematics, Graph theory, Game theory, Combinatorics or Boolean Algebra
 - Q. Probability
 - R. Theoretical or Applied Statistics
 - S. Mathematical Logic (e.g., truth tables, symbolic logic, propositional logic, set theory, binary operations)
- 1 = Studied
2 = Not studied

Variable Name(s): MFB001A, MFB001B, MFB001C, MFB001D, MFB001E, MFB001F, MFB001G, MFB001H, MFB001I, MFB001J, MFB001K, MFB001L, MFB001M, MFB001N, MFB001O, MFB001P, MFB001Q, MFB001R, MFB001S

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-01R	D	Statistics or applied statistics
OMAN	PG-B-01A-01S	X	Question not administered or data not available (booklet 8 only)
POLAND	PG-B-01A-01S	D	Nationally defined categories: 1 = Yes 2 = No

PG-B-02A-G

Question:

Consider the following list of mathematics topics that are often taught at the <primary> or <secondary> school level. Please indicate whether you have studied each topic as part of your current teacher preparation program.

- A. Numbers (e.g., whole numbers, fractions, decimals, integer, rational, and real numbers; number concepts; number theory; estimation; ratio and proportionality)
 - B. Measurement (e.g., measurement units; computations and properties of length, perimeter, area, and volume; estimation and error)
 - C. Geometry (e.g., 1-D and 2-D coordinate geometry, Euclidean geometry, transformational geometry, congruence and similarity, constructions with straightedge and compass, 3-D geometry, vector geometry)
 - D. Functions, Relations, and Equations (e.g., algebra, trigonometry, analytic geometry)
 - E. Data Representation, Probability, and Statistics
 - F. Calculus (e.g., infinite processes, change, differentiation, integration)
 - G. Validation, Structuring, and Abstracting (e.g., Boolean algebra, mathematical induction, logical connectives, sets, groups, fields, linear space, isomorphism, homomorphism)
- 1 = Studied
2 = Not studied

Variable Name(s): MFB002A, MFB002B, MFB002C, MFB002D, MFB002E, MFB002F, MFB002G

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-02A	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics topics that are often taught at the primary or secondary school level. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics topics that are often taught at the primary or secondary school level. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum)</p> <p>Numbers (e.g., non-negative integers, fractions, decimals, integer, rational, and real numbers; number concepts; number theory; estimation; ratio and proportionality)</p>
CHINESE TAIPEI	PG-B-02B-02F	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics topics that are often taught at the primary or secondary school level. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics topics that are often taught at the primary or secondary school level. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum)</p>

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-02G	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics topics that are often taught at the primary or secondary school level. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics topics that are often taught at the primary or secondary school level. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum)</p> <p>Validation, Structuring, and Abstracting (e.g., Boolean algebra, mathematical induction, logical connectives, sets, groups, fields, linear / vector space, isomorphism, homomorphism)</p>
PHILIPPINES	PG-B-02A-02G	D	<p>Stem of the question changed: Consider the following list of mathematics topics that are often taught at the elementary or secondary school level. Please indicate whether you have studied each topic as part of your teacher preparation program</p>
POLAND	PG-B-02A-02G	D	<p>Stem of the question changed: Consider the following list of mathematics topics that are often taught in school. Please indicate whether you have studied each topic as part of your current teacher preparation program</p> <p>Nationally defined categories: 1 = Yes 2 = No</p>
UNITED STATES	PG-B-02A-02G	D	K-12 level

PG-B-03A-C

Question:

In your teacher preparation program, at what level is emphasis given to learning mathematics?
 A. Learning mathematics at the level of the school curriculum
 B. Learning school mathematics topics at a deeper more conceptual level than the school curriculum
 C. Learning mathematics beyond the school curriculum with no direct relation to the school curriculum
 1 = Yes
 2 = No

Variable Name(s): MFB003A, MFB003B, MFB003C

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-03A-03C	D	Future Primary Teacher Questionnaire - Stem of the question changed: In your teacher preparation program (including the practicum, the department's curriculum), at what level is emphasis given to learning mathematics? Future Secondary Teacher Questionnaire - Stem of the question changed: In your teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), at what level is emphasis given to learning mathematics?

PG-B-04A-H**Question:**

Consider the following list of mathematics education/<pedagogy> topics. Please indicate whether you have studied each topic as part of your current teacher preparation program.

A. Foundations of Mathematics (e.g., mathematics and philosophy, mathematics epistemology, history of mathematics)

B. Context of Mathematics Education (e.g., role of mathematics in society, gender/ethnic aspects of mathematics achievement)

C. Development of Mathematics Ability and Thinking (e.g., theories of mathematics ability and thinking; developing mathematical concepts; reasoning, argumentation, and proving; abstracting and generalizing; carrying out procedures and algorithms; application; modeling)

D. Mathematics Instruction (e.g., representation of mathematics content and concepts, teaching methods, analysis of mathematical problems and solutions, problem posing strategies, teacher-pupil interaction)

E. Developing Teaching Plans (e.g., selection and sequencing the mathematics content, studying and selecting textbooks and instructional materials)

F. Mathematics Teaching: Observation, Analysis and Reflection

G. Mathematics Standards and Curriculum

H. Affective Issues in Mathematics (e.g., beliefs, attitudes, mathematics anxiety)

1 = Studied

2 = Not studied

Variable Name(s): MFB004A, MFB004B, MFB004C, MFB004D, MFB004E, MFB004F, MFB004G, MFB004H

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-04A-04F	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the mathematical subjects,</p>
CHINESE TAIPEI	PG-B-04G	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum)</p>

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-04H	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your current teacher preparation program (including the practicum, the mathematical subjects,</p>
PHILIPPINES	PG-B-04A-04H	D	<p>Stem of the question changed: Consider the following list of mathematics education / pedagogy topics. Please indicate whether you have studied each topic as part of your teacher preparation program</p>
POLAND	PG-B-04A	D	<p>Nationally defined categories: 1 = Yes 2 = No</p>
POLAND	PG-B-04B	D	<p>Context of Mathematics Education (e.g., role of mathematics in society, gender aspects of mathematics achievement)</p> <p>Nationally defined categories: 1 = Yes 2 = No</p>
POLAND	PG-B-04C-04G	D	<p>Nationally defined categories: 1 = Yes 2 = No</p>
POLAND	PG-B-04H	D	<p>Beliefs and attitudes related to mathematics</p> <p>Nationally defined categories: 1 = Yes 2 = No</p>
SINGAPORE	PG-B-04G	D	Mathematics Standards (Syllabus) and Curriculum
SWITZERLAND	PG-B-04A-04H	D	Mathematics pedagogy

PG-B-05A-O**Question:**

In the mathematics education<pedagogy/teaching methods> courses that you have taken or are currently taking in your teacher preparation program, how frequently did you do any of the following?

- A. Listen to a lecture
 - B. Ask questions during class time
 - C. Participate in a whole class discussion
 - D. Make presentations to the rest of the class
 - E. Teach a class session using methods of my own choice
 - F. Teach a class session using methods demonstrated by the instructor
 - G. Work together in groups during class
 - H. Read about research on mathematics
 - I. Read about research on mathematics education
 - J. Read about research on teaching and learning
 - K. Analyze examples of teaching (e.g., film, video, transcript of lesson)
 - L. Write mathematical proofs
 - M. Solve problems in applied mathematics
 - N. Solve a given mathematics problem using multiple strategies
 - O. Use computers or calculators to solve mathematics problems
- 1 = Often
2 = Occasionally
3 = Rarely
4 = Never

Variable Name(s): MFB005A, MFB005B, MFB005C, MFB005D, MFB005E, MFB005F, MFB005G, MFB005H, MFB005I, MFB005J, MFB005K, MFB005L, MFB005M, MFB005N, MFB005O

Country	Item ID	Code	Documentation
CHILE	PG-B-05A-05O	D	Didactics
CHINESE TAIPEI	PG-B-05A-05O	D	Stem of the question changed: In the mathematics education pedagogy courses that you had in your teacher preparation program, how frequently did you do any of the following?
GEORGIA	PG-B-05A-05O	D	Mathematics pedagogy
NORWAY	PG-B-05A-05O	D	Mathematics education courses
OMAN	PG-B-05A-05O	D	Mathematics courses
SINGAPORE	PG-B-05A-05O	D	Curriculum studies (CS)
SPAIN	PG-B-05I	X	Dimension not administered or data not available
SWITZERLAND	PG-B-05A-05O	D	Mathematics pedagogy / teaching methods

PG-B-06A-Z

Question:

In your current teacher preparation program, how frequently did you engage in activities that gave you the opportunity to learn how to do the following?

- A. Accommodate a wide range of abilities in each lesson
- B. Analyze and use national or state standards or frameworks for school mathematics
- C. Analyze pupil assessment data to learn how to assess more effectively
- D. Assess higher-level goals (e.g., problem-solving, critical thinking)
- E. Assess low-level objectives (factual knowledge, routine procedures and so forth)
- F. Build on pupils' existing mathematics knowledge and thinking skills
- G. Create learning experiences that make the central concepts of subject matter meaningful to pupils
- H. Create projects that motivate all pupils to participate
- I. Deal with learning difficulties so that specific pupil outcomes are accomplished
- J. Develop games or puzzles that provide instructional activities at a high interest level
- K. Develop instructional materials that build on pupils' experiences, interests and abilities
- L. Explore how to apply mathematics to real-world problems
- M. Explore how to use manipulative (concrete) materials or physical models to solve mathematics problems
- N. Explore mathematics as the source for real-world problems
- O. Give useful and timely feedback to pupils about their learning
- P. Help pupils learn how to assess their own learning
- Q. Learn how to explore multiple solution strategies with pupils
- R. Learn how to show why a mathematics procedure works
- S. Locate suitable curriculum materials and teaching resources
- T. Make distinctions between procedural and conceptual knowledge when teaching mathematics concepts and operations to pupils
- U. Use assessment to give effective feedback to parents or guardians
- V. Use assessment to give feedback to pupils about their learning
- W. Use classroom assessments to guide your decisions about what and how to teach
- X. Use pupils' misconceptions to plan instruction
- Y. Use standardized assessments to guide your decisions about what and how to teach
- Z. Integrate mathematical ideas from across areas of mathematics

- 1 = Often
- 2 = Occasionally
- 3 = Rarely
- 4 = Never

Variable Name(s): MFB006A, MFB006B, MFB006C, MFB006D, MFB006E, MFB006F, MFB006G, MFB006H, MFB006I, MFB006J, MFB006K, MFB006L, MFB006M, MFB006N, MFB006O, MFB006P, MFB006Q, MFB006R, MFB006S, MFB006T, MFB006U, MFB006V, MFB006W, MFB006X, MFB006Y, MFB006Z

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-06A	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p>

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-06B	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Analyze and use ninth sequential mathematics curriculum</p>
CHINESE TAIPEI	PG-B-06C-06X	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p>
CHINESE TAIPEI	PG-B-06Y	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Use standardized assessments (e.g. Basic Competence Test) to guide your decisions about what and how to teach</p>
CHINESE TAIPEI	PG-B-06Z	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: In your current teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p>
PHILIPPINES	PG-B-06A-06Z	D	<p>Stem of the question changed: In your teacher preparation program, how frequently did you engage in activities that gave you the opportunity to learn how to do the following?</p>
POLAND	PG-B-06B	D	Using standards or frameworks for school mathematics
POLAND	PG-B-06N	D	Exploring mathematics as the help in solving problems

PG-B-07A-H**Question:**

Consider the following topics in education and <pedagogy>. Please indicate whether you have studied each topic as part of your current teacher preparation program.

A. History of Education and Educational Systems (e.g., historical development of the national system, development of international systems)

B. Philosophy of Education (e.g., ethics, values, theory of knowledge, legal issues)

C. Sociology of Education (e.g., purpose and function of education in society, organization of current educational systems, education and social conditions, diversity, educational reform)

D. Educational Psychology (e.g., motivational theory, child development, learning theory)

E. Theories of Schooling (e.g., goals of schooling, teacher's role, curriculum theory and development, didactic/teaching models, teacher-pupil relations, school administration and leadership)

F. Methods of Educational Research (e.g., read, interpret and use education research; theory and practice of action research)

G. Assessment and Measurement: Theory and Practice

H. Knowledge of Teaching (e.g., knowing how to teach pupils of different backgrounds, use resources to support instruction, manage classrooms, communicate with parents)

1 = Studied

2 = Not studied

Variable Name(s): MFB007A, MFB007B, MFB007C, MFB007D, MFB007E, MFB007F, MFB007G, MFB007H

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-07C	D	Sociology of Education (e.g., purpose and function of education in society, current educational systems, education and social conditions, diversity, educational reform)
PHILIPPINES	PG-B-07A-07H	D	Stem of the question changed: Consider the following topics in education and pedagogy. Please indicate whether you have studied each topic as part of your teacher preparation program
POLAND	PG-B-07A	D	Nationally defined categories: 1 = Yes 2 = No
POLAND	PG-B-07B	D	Philosophy and ethics of education Nationally defined categories: 1 = Yes 2 = No
POLAND	PG-B-07C-07H	D	Nationally defined categories: 1 = Yes 2 = No
SWITZERLAND	PG-B-07A-07H	D	Pedagogy / educational science

PG-B-08A-J**Question:**

In your teacher preparation program, how often did you have the opportunity to learn to do the following?

- A. Develop specific strategies for teaching students with behavioral and emotional problems
- B. Develop specific strategies and curriculum for teaching pupils with learning disabilities
- C. Develop specific strategies and curriculum for teaching gifted pupils
- D. Develop specific strategies and curriculum for teaching pupils from diverse cultural backgrounds
- E. Accommodate the needs of pupils with physical disabilities in your classroom
- F. Work with children from poor or disadvantaged backgrounds
- G. Use teaching standards and codes of conduct to reflect on your teaching
- H. Develop strategies to reflect upon the effectiveness of your teaching
- I. Develop strategies to reflect upon your professional knowledge
- J. Develop strategies to identify your learning needs

1 = Often

2 = Occasionally

3 = Rarely

4 = Never

Variable Name(s): MFB008A, MFB008B, MFB008C, MFB008D, MFB008E, MFB008F, MFB008G, MFB008H, MFB008I, MFB008J

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-08A-08J	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: In your teacher preparation program (including the practicum, the department's curriculum), how often did you have the opportunity to learn to do the following?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: In your teacher preparation program (including the practicum, the mathematical subjects, the department's curriculum), how often did you have the opportunity to learn to do the following?</p>
POLAND	PG-B-08B	D	Accommodate the needs of pupils with difficulties in learning (for example dyslexia, dysgraphia)

PG-B-09A-L

Question:

In your teacher preparation program, how often did you have the opportunity to learn to do the following?

- A. Study stages of child development and learning
 - B. Develop research projects to test teaching strategies for pupils of diverse abilities
 - C. Consider the relationship between education, social justice and democracy
 - D. Observe teachers modeling new teaching practices
 - E. Develop and test new teaching practices
 - F. Set appropriately challenging learning expectations for pupils
 - G. Learn how to use findings from research to improve knowledge and practice
 - H. Connect learning across subject areas
 - I. Study ethical standards and codes of conduct expected of teachers
 - J. Create methods to enhance pupils' confidence and self-esteem
 - K. Identify opportunities for changing existing schooling practices
 - L. Identify appropriate resources needed for teaching
- 1 = Often
 2 = Occasionally
 3 = Rarely
 4 = Never

Variable Name(s): MFB009A, MFB009B, MFB009C, MFB009D, MFB009E, MFB009F, MFB009G, MFB009H, MFB009I, MFB009J, MFB009K, MFB009L

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-09A-09L	D	Stem of the question changed: In your teacher preparation program (including the practicum, the department's curriculum), how often did you have the opportunity to learn to do the following?

PG-B-10

Question:

Did you spend any time in a <primary or secondary school> on <field experience and/or practicum> as part of your teacher preparation program?

- 1 = Yes
- 2 = No

Variable Name(s): MFB010

Country	Item ID	Code	Documentation
CHILE	PG-B-10	D	Did you spent any time in a basic or middle school on short experience or teaching practice as part of your teacher preparation program?
POLAND	PG-B-10	D	Primary, lower secondary or upper-secondary school
SPAIN	PG-B-10	D	Primary or secondary educational institutions
SWITZERLAND	PG-B-10	D	Practical experiences at school
UNITED STATES	PG-B-10	D	Stem of the question changed: How much total time (in weeks) did you spend in an elementary, middle school, or high school fi eld experience and/or practicum as part of your teacher preparation program? National categories recoded to fit international categories: 1 = 1-9 / 10-18 / 19-27 / 28-36 / more than 36 2 = 0

PG-B-11**Question:**

For what proportion of this time were you temporarily in charge of teaching the class (as opposed to observation, assistance, individual tutoring, etc.)?

- 1 = Less than $\frac{1}{4}$ of the time
 2 = $\frac{1}{4}$ or more, but less than $\frac{1}{2}$
 3 = $\frac{1}{2}$ or more, but less than $\frac{3}{4}$
 4 = $\frac{3}{4}$ or more

Variable Name(s): MFB011

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-11	D	Stem of the question changed: For what proportion of this time did you predict that you were temporarily in charge of teaching the class (as opposed to observation, assistance, individual tutoring, etc.)?

PG-B-12**Question:**

For about how much of the time in the <field experience/practicum>, was one of your assigned <mentors/instructors/supervisors> present in the same room as you?

- 1 = Less than $\frac{1}{4}$ of the time
 2 = $\frac{1}{4}$ or more, but less than $\frac{1}{2}$
 3 = $\frac{1}{2}$ or more, but less than $\frac{3}{4}$
 4 = $\frac{3}{4}$ or more

Variable Name(s): MFB012

Country	Item ID	Code	Documentation
CHILE	PG-B-12	D	For about how much of the time in the teaching practice, was one of your assigned teaching supervisors present in the same room as you?
POLAND	PG-B-12	D	The teacher that was your mentor in school
SINGAPORE	PG-B-12	D	Cooperating teachers
SPAIN	PG-B-12	D	Appointed teachers / tutors
SWITZERLAND	PG-B-12	D	Practicum supervising teacher

PG-B-13A-H**Question:**

During the school experience part of your program, how often were you required to do each of the following?

- A. Observe models of the teaching strategies you were learning in your <courses>
 - B. Practice theories for teaching mathematics that you were learning in your <courses>
 - C. Complete assessment tasks that asked you to show how you were applying ideas you were learning in your <courses>
 - D. Receive feedback about how well you had implemented teaching strategies you were learning in your <courses>
 - E. Collect and analyze evidence about pupil learning as a result of your teaching methods
 - F. Test out findings from educational research about difficulties pupils have in learning in your <courses>
 - G. Develop strategies to reflect upon your professional knowledge
 - H. Demonstrate that you could apply the teaching methods you were learning in your <courses>
- 1 = Often
2 = Occasionally
3 = Rarely
4 = Never

Variable Name(s): MFB013A, MFB013B, MFB013C, MFB013D, MFB013E, MFB013F, MFB013G, MFB013H

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-B-13A-13H	D	Stem of the question changed: During the teaching practicum or pedagogical practicum, how often were you required to do each of the following?
GEORGIA	PG-B-13A-13D	D	School practise course
GEORGIA	PG-B-13F	D	School practise course
GEORGIA	PG-B-13H	D	School practise course
GERMANY	PG-B-13A-13D	D	Vocational training courses
GERMANY	PG-B-13H	D	Vocational training courses
RUSSIAN FEDERATION	PG-B-13F	D	Lessons
SINGAPORE	PG-B-13A-13H	D	Stem of the question changed: During the school experience and practicum part of your programme, how often were you required to do each of the following?

PG-B-14A-K
Question:

To what extent do you agree or disagree with the following statements about the <field experience and/or practicum> you had in your teacher preparation program?

A. I had a clear understanding of what my school-based <supervising teacher/ mentor/instructors> expected of me as a teacher in order to pass the <field experiences/ practicum>.

B. My school-based <supervising teacher/mentor/instructors> valued the ideas and approaches I brought from my <university/college> teacher education program.

C. My school-based <supervising teacher/mentor/instructors> used criteria/standards provided by my <university/college> when reviewing my lessons with me.

D. I learned the same criteria or standards for good teaching in my <courses> and in my <field experiences /practicum>.

E. In my <field experience / practicum> I had to demonstrate to my supervising teacher that I could teach according to the same criteria/standards used in my <university/college> <courses>.

F. The feedback I received from my <supervising teacher/mentor/instructors> helped me to improve my understanding of pupils.

G. The feedback I received from my <supervising teacher/mentor/instructors> helped me improve my teaching methods.

H. The feedback I received from my <supervising teacher/mentor/instructors> helped me improve my understanding of the curriculum.

I. The feedback I received from my <supervising teacher/mentor/instructors> helped me improve my knowledge of mathematics content.

J. The methods of teaching I used in my <field experiences/ practicum> were quite different from the methods I was learning in my <university/college> <courses>.

K. The regular supervising teacher in my <field experiences/ practicum> classroom taught in ways that were quite different from the methods I was learning in my <university/college> <courses>.

1 = Agree

2 = Slightly agree

3 = Slightly disagree

4 = Disagree

Variable Name(s): MFB014A, MFB014B, MFB014C, MFB014D, MFB014E, MFB014F, MFB014G, MFB014H, MFB014I, MFB014J, MFB014K

Country	Item ID	Code	Documentation
CHILE	PG-B-14A-14C	D	Supervisor
CHILE	PG-B-14F-14I	D	Supervisor
CHINESE TAIPEI	PG-B-14K	D	The school mentors of practicum in my practicum classroom taught in ways that were quite different from the methods I was learning in my university courses
GEORGIA	PG-B-14D-14E	D	School practise course
GEORGIA	PG-B-14J-14K	D	School practise course
GERMANY	PG-B-14B-14C	D	Teacher training program / second phase training institutions
GERMANY	PG-B-14D	D	Part-time vocational school Vocational training courses
GERMANY	PG-B-14E	D	In my vocational training courses I had to demonstrate to my supervising teacher that I could teach according to the same criteria / standards used in my second phase training institutions.
GERMANY	PG-B-14J	D	The methods of teaching I used in my vocational training courses were quite different from the methods I was learning in my second phase training institutions

Country	Item ID	Code	Documentation
GERMANY	PG-B-14K	D	The regular supervising teacher in my vocational training seminars classroom taught in ways that were quite different from the methods I was learning in my second phase training institutions
POLAND	PG-B-14A	D	I had a clear understanding of what the teacher that was your mentor in school expected of me as a teacher in order to pass the practicum
POLAND	PG-B-14B	D	The teacher that was your mentor in school valued the ideas and approaches I brought in my studies
POLAND	PG-B-14C	D	The teacher that was your mentor in school used criteria / standards provided in my studies when reviewing my lessons with me
POLAND	PG-B-14E	D	Practicum
POLAND	PG-B-14F-14I	D	The teacher that was your mentor in school
POLAND	PG-B-14J	D	The methods of teaching I used in my practicum were quite different from the methods I was learning in my studies
SINGAPORE	PG-B-14A-14C	D	Cooperating teachers
SINGAPORE	PG-B-14F-14I	D	Cooperating teachers
SPAIN	PG-B-14A-14C	D	Teaching practice tutor / teacher
SPAIN	PG-B-14F-14I	D	Teaching practice tutor / teacher
SWITZERLAND	PG-B-14B-14C	D	Education / training
SWITZERLAND	PG-B-14E	D	Education / training
SWITZERLAND	PG-B-14J	D	Education / training
SWITZERLAND	PG-B-14K	D	Education / training Internship / practicum supervising teacher

PG-B-15A-F**Question:**

Consider all of the <courses> in the program including subject matter <courses> (e.g., mathematics), mathematics <pedagogy> <courses>, and general education <pedagogy> <courses>. Please indicate the extent to which you agree or disagree with the following statements.

A. Each stage of the program seemed to be planned to meet the main needs I had at that stage of my preparation.

B. Later <courses> in the program built on what was taught in earlier <courses> in the program.

C. The program was organized in a way that covered what I needed to learn to become an effective teacher.

D. The <courses> seemed to follow a logical sequence of development in terms of content and topics.

E. Each of my <courses> was clearly designed to prepare me to meet a common set of explicit standard expectations for beginning teachers.

F. There were clear links between most of the <courses> in my teacher education program.

1 = Agree

2 = Slightly agree

3 = Slightly disagree

4 = Disagree

Variable Name(s): MFB015A, MFB015B, MFB015C, MFB015D, MFB015E, MFB015F

Country	Item ID	Code	Documentation
GEORGIA	PG-B-15A-15F	D	School practise course
POLAND	PG-B-15A-15F	D	Pedagogy, broadly defined
SINGAPORE	PG-B-15A-15F	D	Stem of the question changed: Consider all of the courses in the programme including subject matter courses (e.g., mathematics SK and / or AS), mathematics pedagogy courses (curriculum studies, CS), and general education courses (education studies, ES). Please indicate the extent to which you agree or disagree with the following statements
SWITZERLAND	PG-B-15A-15F	D	Didactics in general and pedagogy

PG-D-03A-H**Question:**

To what extent do you agree or disagree with each of the following statements about pupil achievement in <primary/lower secondary> mathematics?

A. Since older pupils can reason abstractly, the use of hands-on models and other visual aids becomes less necessary.

B. To be good at mathematics you need to have a kind of “mathematical mind”.

C. Mathematics is a subject in which natural ability matters a lot more than effort.

D. Only the more able pupils can participate in multi-step problem solving activities.

E. In general, boys tend to be naturally better at mathematics than girls.

F. Mathematical ability is something that remains relatively fixed throughout a person’s life.

G. Some people are good at mathematics and some aren’t.

H. Some ethnic groups are better at mathematics than others.

1 = Strongly agree

2 = Agree

3 = Slightly agree

4 = Slightly disagree

5 = Disagree

6 = Strongly disagree

Variable Name(s): MFD003A, MFD003B, MFD003C, MFD003D, MFD003E, MFD003F, MFD003G, MFD003H

Country	Item ID	Code	Documentation
BOTSWANA	PG-D-03A-03H	D	Primary / junior secondary
SPAIN	PG-D-03A-03H	D	Primary / compulsory secondary

PG-D-04A-M**Question:**

Please indicate the extent to which you think your teacher education program has prepared you to do the following when you start your teaching career.

- A. Communicate ideas and information about mathematics clearly to pupils
- B. Establish appropriate learning goals in mathematics for pupils
- C. Set up mathematics learning activities to help pupils achieve learning goals
- D. Use questions to promote higher order thinking in mathematics
- E. Use computers and ICT to aid in teaching mathematics
- F. Challenge pupils to engage in critical thinking about mathematics
- G. Establish a supportive environment for learning mathematics
- H. Use assessment to give effective feedback to pupils about their mathematics learning
- I. Provide parents with useful information about your pupils' progress in mathematics
- J. Develop assessment tasks that promote learning in mathematics
- K. Incorporate effective classroom management strategies into your teaching of mathematics
- L. Have a positive influence on difficult or unmotivated pupils
- M. Work collaboratively with other teachers

1 = A major extent

2 = A moderate extent

3 = A minor extent

4 = Not at all

Variable Name(s): MFD004A, MFD004B, MFD004C, MFD004D, MFD004E, MFD004F, MFD004G, MFD004H, MFD004I, MFD004J, MFD004K, MFD004L, MFD004M

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-D-04A-04M	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Please indicate the extent to which you think your teacher education program (including the practicum, the department's curriculum) has prepared you to do the following when you start your teaching career.</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Please indicate the extent to which you think your teacher education program (including the practicum, the mathematical subjects, the department's curriculum) has prepared you to do the following when you start your teaching career.</p>

PG-D-05A-F**Question:**

To what extent do you agree or disagree with the following statements?
The instructors who teach mathematics-related <courses> in your current teacher preparation program:

- A. Model good teaching practices in their teaching
- B. Draw on and use research relevant to the content of their <courses>
- C. Model evaluation and reflection on their own teaching
- D. Value the learning and experiences you had prior to starting the program
- E. Value the learning and experiences you had in your field experience and or practicum
- F. Value the learning and experiences you had in your teacher preparation program

1 = Strongly agree

2 = Agree

3 = Slightly agree

4 = Slightly disagree

5 = Disagree

6 = Strongly disagree

Variable Name(s): MFD005A, MFD005B, MFD005C, MFD005D, MFD005E, MFD005F

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-D-05A-05F	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: To what extent do you agree or disagree with the following statements? The instructors (including professors in universities, mentors in primary schools) who teach mathematics-related courses in your current teacher preparation program (including the practicum, the department's curriculum)</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: To what extent do you agree or disagree with the following statements? The instructors (including professors in universities, mentors in secondary schools) who teach mathematics-related courses in your current teacher preparation program (including practicum, mathematical subjects, mathematical pedagogy subjects)</p>
GEORGIA	PG-D-05A-05F	D	Subjects / courses

PG-D-06**Question:**

Overall, how effective do you believe your pre-service teacher education program was in preparing you to teach mathematics?

- 1 = Very ineffective
- 2 = Ineffective
- 3 = Effective
- 4 = Very effective

Variable Name(s): MFD006

Country	Item ID	Code	Documentation
CHINESE TAIPEI	PG-D-06	D	<p>Future Primary Teacher Questionnaire - Stem of the question changed: Overall, how effective do you believe your pre-service teacher education program (including the practicum) was in preparing you to teach mathematics?</p> <p>Future Secondary Teacher Questionnaire - Stem of the question changed: Overall, how effective do you believe your pre-service teacher education program (including the practicum, the mathematical subjects, the department's curriculum) was in preparing you to teach mathematics?</p>
POLAND	PG-D-06	D	<p>Stem of the question changed: In general, how do you think, how well did your studies prepare you to teach mathematics topics?</p> <p>Nationally defined categories: 1 = Very badly 2 = Badly 3 = Well 4 = Very well</p>

COURSE**Question(s):**

[various]

International Term: COURSE

Country	Item ID	Code	Documentation
BOTSWANA	COURSE	D	Course
CANADA	COURSE	D	Course
CHILE	COURSE	D	Course
CHINESE TAIPEI	COURSE	D	Course / curriculum / university curriculum
GEORGIA	COURSE	D	Course
GERMANY	COURSE	D	Course / vocational training course / seminar
MALAYSIA	COURSE	D	Course
NORWAY	COURSE	D	Study unit / course
OMAN	COURSE	D	Course
PHILIPPINES	COURSE	D	Course
POLAND	COURSE	D	Didactic course / courses
RUSSIAN FEDERATION	COURSE	D	Course
SINGAPORE	COURSE	D	Course
SPAIN	COURSE	D	Subject
SWITZERLAND	COURSE	D	Course
THAILAND	COURSE	D	Course
UNITED STATES	COURSE	D	Course

FIELD EXPERIENCE / PRACTICUM
Question(s):

MFB010, MFB012, MFB014, MFB014A, MFB014D, MFB014E, MFB014J, MFB014K

International Term: FIELD EXPERIENCE / PRACTICUM

Country	Item ID	Code	Documentation
BOTSWANA	FIELD EXPERIENCE / PRACTICUM	D	Teaching practice / field experience
CANADA	FIELD EXPERIENCE / PRACTICUM	D	Field experience / practicum
CHILE	FIELD EXPERIENCE / PRACTICUM	D	Practicum / field experience / teaching practice
CHINESE TAIPEI	FIELD EXPERIENCE / PRACTICUM	D	Practicum / pedagogical practicum
GEORGIA	FIELD EXPERIENCE / PRACTICUM	D	Practice
GERMANY	FIELD EXPERIENCE / PRACTICUM	D	Second phase of training (practical training)
MALAYSIA	FIELD EXPERIENCE / PRACTICUM	D	Practicum / field experience
NORWAY	FIELD EXPERIENCE / PRACTICUM	D	Practicum
OMAN	FIELD EXPERIENCE / PRACTICUM	D	Field experience
PHILIPPINES	FIELD EXPERIENCE / PRACTICUM	D	Field experience / practicum
POLAND	FIELD EXPERIENCE / PRACTICUM	D	Professional practice
RUSSIAN FEDERATION	FIELD EXPERIENCE / PRACTICUM	D	Pedagogical practice
SINGAPORE	FIELD EXPERIENCE / PRACTICUM	D	Practicum / school experience
SPAIN	FIELD EXPERIENCE / PRACTICUM	D	Field experience / teaching practice
SWITZERLAND	FIELD EXPERIENCE / PRACTICUM	D	Internship / field experience
THAILAND	FIELD EXPERIENCE / PRACTICUM	D	Field experience / practicum
UNITED STATES	FIELD EXPERIENCE / PRACTICUM	D	Field experience

PEDAGOGY**Question(s):**

[various]

International Term: PEDAGOGY

Country	Item ID	Code	Documentation
BOTSWANA	PEDAGOGY	D	Pedagogy
CANADA	PEDAGOGY	D	Pedagogy
CHILE	PEDAGOGY	D	Pedagogy / didactics
CHINESE TAIPEI	PEDAGOGY	D	Pedagogy / teaching methods / methods in education / materials and methods of teaching
GEORGIA	PEDAGOGY	D	Pedagogy
GERMANY	PEDAGOGY	D	Didactics
MALAYSIA	PEDAGOGY	D	Pedagogy
NORWAY	PEDAGOGY	D	Pedagogy
OMAN	PEDAGOGY	D	Pedagogy
PHILIPPINES	PEDAGOGY	D	Pedagogy
POLAND	PEDAGOGY	D	Didactics
RUSSIAN FEDERATION	PEDAGOGY	D	Methods of teaching / pedagogy
SINGAPORE	PEDAGOGY	D	Pedagogy
SPAIN	PEDAGOGY	D	Didactics / pedagogy
SWITZERLAND	PEDAGOGY	D	Pedagogy / didactics
THAILAND	PEDAGOGY	D	Pedagogy
UNITED STATES	PEDAGOGY	D	Pedagogy (Institutional Program Questionnaire) / Education (Educator Questionnaire)

PRIMARY**Question(s):**

[various]

International Term: PRIMARY

Country	Item ID	Code	Documentation
BOTSWANA	PRIMARY	D	Primary
CANADA	PRIMARY	D	Primary
CHILE	PRIMARY	D	Basic
CHINESE TAIPEI	PRIMARY	D	Primary
GEORGIA	PRIMARY	D	Primary
GERMANY	PRIMARY	D	Primary level
MALAYSIA	PRIMARY	D	Primary
NORWAY	PRIMARY	D	Primary
OMAN	PRIMARY	D	Primary
PHILIPPINES	PRIMARY	D	Elementary
POLAND	PRIMARY	D	Primary
RUSSIAN FEDERATION	PRIMARY	D	Primary (1-4 grades)
SINGAPORE	PRIMARY	D	Primary
SPAIN	PRIMARY	D	Primary
SWITZERLAND	PRIMARY	D	Primary
THAILAND	PRIMARY	D	Primary
UNITED STATES	PRIMARY	D	Elementary

SECONDARY**Question(s):**

[various]

International Term: SECONDARY

Country	Item ID	Code	Documentation
BOTSWANA	SECONDARY	D	Secondary
CANADA	SECONDARY	D	Secondary
CHILE	SECONDARY	D	Middle education
CHINESE TAIPEI	SECONDARY	D	Secondary / senior high school
GEORGIA	SECONDARY	D	Secondary / basic
GERMANY	SECONDARY	D	Secondary level
MALAYSIA	SECONDARY	D	Secondary
NORWAY	SECONDARY	D	Upper secondary school
OMAN	SECONDARY	D	Secondary
PHILIPPINES	SECONDARY	D	Secondary
POLAND	SECONDARY	D	Lower and upper secondary schools
RUSSIAN FEDERATION	SECONDARY	D	Secondary (5-11 grades)
SINGAPORE	SECONDARY	D	Secondary
SPAIN	SECONDARY	D	Secondary
SWITZERLAND	SECONDARY	D	Secondary
THAILAND	SECONDARY	D	Secondary
UNITED STATES	SECONDARY	D	Middle / High school

UNIVERSITY / COLLEGE**Question(s):**

MFB014B, MFB014C, MFB014E, MFB014J, MFB014K

International Term: UNIVERSITY / COLLEGE

Country	Item ID	Code	Documentation
BOTSWANA	UNIVERSITY / COLLEGE	D	University / college
CANADA	UNIVERSITY / COLLEGE	D	University / college
CHILE	UNIVERSITY / COLLEGE	D	University / Institute
CHINESE TAIPEI	UNIVERSITY / COLLEGE	D	The teacher preparation institution in university / university
GEORGIA	UNIVERSITY / COLLEGE	D	University / college
GERMANY	UNIVERSITY / COLLEGE	D	University / seminar
MALAYSIA	UNIVERSITY / COLLEGE	D	University / college
NORWAY	UNIVERSITY / COLLEGE	D	University level / teacher education institution
OMAN	UNIVERSITY / COLLEGE	D	University / college
PHILIPPINES	UNIVERSITY / COLLEGE	D	University / college
POLAND	UNIVERSITY / COLLEGE	D	University / college
RUSSIAN FEDERATION	UNIVERSITY / COLLEGE	D	Higher educational institution
SINGAPORE	UNIVERSITY / COLLEGE	D	NIE / University
SPAIN	UNIVERSITY / COLLEGE	D	University / faculty
SWITZERLAND	UNIVERSITY / COLLEGE	D	University / college of higher education
THAILAND	UNIVERSITY / COLLEGE	D	University
UNITED STATES	UNIVERSITY / COLLEGE	D	University / College

Section 4 - TEDS-M 2008 <ISCED> Adaptations

Country	Item ID	Code	Documentation
BOTSWANA	ISCED 0	D	Pre-Primary
BOTSWANA	ISCED 1	D	Primary
BOTSWANA	ISCED 2	D	Junior Certificate (DIG) Junior secondary (DPG/DSG)
BOTSWANA	ISCED 3	D	BGCSE / COSC (DIG) Senior secondary (DPG/DSG)
BOTSWANA	ISCED 4	D	Diploma / Certificate (DIG) Vocational and technical courses (DPG/DSG)
BOTSWANA	ISCED 5A 1st degree	D	1st degree (DIG/DEG) Academic Degree (DPG/DSG)
BOTSWANA	ISCED 5A 2nd degree	D	Masters (DIG) Masters Degree (DEG) Masters Programmes (DPG/DSG)
BOTSWANA	ISCED 5B	D	Technical Degree (DPG/DSG) Non-university, tertiary level, 1st Degree+Masters (DEG)
BOTSWANA	ISCED 6	D	Doctorate
CANADA	ISCED 0	D	Pre-primary
CANADA	ISCED 1	D	Primary level
CANADA	ISCED 2	D	Lower secondary
CANADA	ISCED 3	D	Upper secondary
CANADA	ISCED 4	D	College, CEGEP
CANADA	ISCED 5A 1st degree	D	1st university degree (Bachelor)
CANADA	ISCED 5A 2nd degree	D	2nd university degree (Master)
CANADA	ISCED 5B	D	College level (DIG) Practical training (DPG/DSG)

Country	Item ID	Code	Documentation
CANADA	ISCED 6	D	Doctoral level
CHILE	ISCED 0	D	Pre-school
CHILE	ISCED 1	D	Incomplete basic education (less than 8 years)
CHILE	ISCED 2	D	ISCED 2 (DIG) Complete basic education (DPG/DSG)
CHILE	ISCED 3	D	ISCED 3 (DIG) Middle education (DPG/DSG)
CHILE	ISCED 4	D	ISCED 4 (DIG) Higher education, non-university (DPG/DSG)
CHILE	ISCED 5A 1st degree	D	ISCED 5 (Licence) (DIG-B-02) Licence (DIG-G-03B/04B/05B) Licence or Bachelor (DEG-A-03) Undergraduate level (DEG-B-06A) Academic degree (DPG/DSG)
CHILE	ISCED 5A 2nd degree	D	Master's level (DIG/DEG) Other university degree (DPG/DSG)
CHILE	ISCED 5B	D	Technical qualification (DIG) Technical higher education (DPG/DSG)
CHILE	ISCED 6	D	Doctoral level / post-graduate
CHINESE TAIPEI	ISCED 0	D	Preschool
CHINESE TAIPEI	ISCED 1	D	Primary schools
CHINESE TAIPEI	ISCED 2	D	Junior high school courses (DIG) Junior high school (DPG/DSG)
CHINESE TAIPEI	ISCED 3	D	Senior high school or vocational high school courses (DIG) Senior high school or vocational high school (DPG/DSG)
CHINESE TAIPEI	ISCED 4	D	Non higher education beyond senior high school (DIG) 2-year junior college, 3-year junior college, 5-year junior college, or foundation studies (DPG/DSG)
CHINESE TAIPEI	ISCED 5A 1st degree	D	Bachelor degree
CHINESE TAIPEI	ISCED 5A 2nd degree	D	Master's degree

Country	Item ID	Code	Documentation
CHINESE TAIPEI	ISCED 5B	D	Technical and vocational higher education degree (DIG) 2-year college (DIG / DEG)
CHINESE TAIPEI	ISCED 6	D	Doctor's degree
GEORGIA	ISCED 0	D	Pre-primary
GEORGIA	ISCED 1	D	Primary (grades 1-6)
GEORGIA	ISCED 2	D	Basic school (DIG) Basic (including 9th grade) (DPG/DSG)
GEORGIA	ISCED 3	D	Secondary school (DIG) Secondary school diploma (DPG/DSG)
GEORGIA	ISCED 4	D	Post-secondary, non higher education
GEORGIA	ISCED 5A 1st degree	D	Higher education / Bachelor's degree (DIG-B-02) Bachelor's degree (DEG) Higher education - first degree (DPG/DSG)
GEORGIA	ISCED 5A 2nd degree	D	Higher education Master's degree (DIG-B-02) Master's degree (DEG) Higher education - second degree (DPG/DSG)
GEORGIA	ISCED 5B	D	Higher professional education (DIG/DPG/DSG) Specialist (DEG)
GEORGIA	ISCED 6	D	Doctor's degree
GERMANY	ISCED 0	D	Kindergarten
GERMANY	ISCED 1	D	No graduation / school leaving certificate, graduation from school for children with special needs / schools for the learning-impaired, graduation from POS (secondary school, GDR standard school up to 10th grade) after 8th grade or graduation from elementary school ('general school', not primary school)
GERMANY	ISCED 2	D	Secondary school level I certificate (DIG) Graduation from secondary general school, graduation from intermediate school or graduation from POS (secondary school, GDR standard school up to 10th grade) after 10th grade (DPG/DSG)

Country	Item ID	Code	Documentation
GERMANY	ISCED 3	D	Upper secondary level (vocational-(diploma)) or lower secondary level and apprenticeship (DIG) Advanced technical college entrance qualification, vocational diploma, certificate of general higher education entrance qualification (diploma from German secondary school qualifying for university admission or matriculation) (DPG/DSG)
GERMANY	ISCED 4	D	Upper secondary level, apprenticeship (DIG) Completion of an apprenticeship, graduation from commercial school or school providing vocational education (DPG/DSG)
GERMANY	ISCED 5A 1st degree	D	Degree at university of applied sciences / advanced technical college diploma / degree at university of cooperative education or university degree (graduate degree (comparable to Master's degree)) / diploma / 1st state examination) (DIG/DPG/DSG) Basic studies / foundation course / Bachelor (DEG)
GERMANY	ISCED 5A 2nd degree	D	2nd state examination (DIG/DPG/DSG) Advanced / main study period / Master (DEG)
GERMANY	ISCED 5B	D	Degree of university of applied sciences / degree of vocationally oriented upper secondary school / degree of school of public health / Master or technical school
GERMANY	ISCED 6	D	Promotion, conferral of a doctorate (doctoral examination), postdoctoral lecture qualification (DIG) Doctorate education / doctorate schooling (DEG)
MALAYSIA	ISCED 0	D	Kindergarten, TADIK, TASKA
MALAYSIA	ISCED 1	D	Primary
MALAYSIA	ISCED 2	D	Lower secondary
MALAYSIA	ISCED 3	D	Upper secondary
MALAYSIA	ISCED 4	D	Post secondary STPM, Diploma, Matriculation (DIG) Form six, Matriculation (DPG/DSG)
MALAYSIA	ISCED 5A 1st degree	D	B.Ed, B.Sc, B.Sc.Ed (DIG) 1st degree (DEG/DPG/DSG)
MALAYSIA	ISCED 5A 2nd degree	D	Masters (DIG) Second degree (DEG-B-06)
MALAYSIA	ISCED 5B	D	Diploma

Country	Item ID	Code	Documentation
MALAYSIA	ISCED 6	D	Doctorate
NORWAY	ISCED 0	D	Kindergarden
NORWAY	ISCED 1	D	Primary
NORWAY	ISCED 2	D	Lower secondary
NORWAY	ISCED 3	D	Upper secondary
NORWAY	ISCED 4	D	Tertiary practical / technical occupation (DIG) Technical college or corresponding education (DIG-B-2C) Some education from university or college (DPG/DSG)
NORWAY	ISCED 5A 1st degree	D	Bachelor level (DIG/DEG) Lower degree from university or college (DPG/DSG)
NORWAY	ISCED 5A 2nd degree	D	Master level
NORWAY	ISCED 5B	D	Tertiary practical (DIG) Examination from university college (DIG-G-3/4/5A) Practical / technical vocational education (DPG/DSG)
NORWAY	ISCED 6	D	PhD (DIG) Doctoral level (DEG)
OMAN	ISCED 0	D	Pre-school
OMAN	ISCED 1	D	Primary (first cycle)
OMAN	ISCED 2	D	Lower Secondary (second cycle)
OMAN	ISCED 3	D	Upper Secondary (Post-basic education (11, 12))
OMAN	ISCED 4	D	Post-secondary but not higher education (DIG) Post secondary (not university) (DSG)
OMAN	ISCED 5A 1st degree	D	First university degree
OMAN	ISCED 5A 2nd degree	D	Second university degree
OMAN	ISCED 5B	D	Tertiary practical / technical / occupation

Country	Item ID	Code	Documentation
OMAN	ISCED 6	D	Tertiary education, advanced research qualification
PHILIPPINES	ISCED 0	D	Pre-elementary
PHILIPPINES	ISCED 1	D	Elementary
PHILIPPINES	ISCED 2	D	Lower secondary (DIG) Lower secondary - 1st year-2nd year (DPG/DSG)
PHILIPPINES	ISCED 3	D	Upper secondary (DIG) Upper secondary - 3rd year-4th year (DPG/DSG)
PHILIPPINES	ISCED 4	D	Post secondary, non-tertiary
PHILIPPINES	ISCED 5A 1st degree	D	Bachelor's, first degree
PHILIPPINES	ISCED 5A 2nd degree	D	Master's, second degree
PHILIPPINES	ISCED 5B	D	Technical / vocational (non-degree Diploma) (DIG/DEG) Technical / vocational training (DPG/DSG)
PHILIPPINES	ISCED 6	D	Doctorate degree
POLAND	ISCED 0	D	Kindergarten
POLAND	ISCED 1	D	Primary school
POLAND	ISCED 2	D	Lower secondary school / gymnasium
POLAND	ISCED 3	D	Upper secondary
POLAND	ISCED 4	D	Post-secondary school
POLAND	ISCED 5A 1st degree	D	1st degree of tertiary education
POLAND	ISCED 5A 2nd degree	D	2nd degree of tertiary education
POLAND	ISCED 5B	D	College Teachers' college or language teachers' college (DIG)
POLAND	ISCED 6	D	Doctoral studies

Country	Item ID	Code	Documentation
RUSSIAN FEDERATION	ISCED 0	D	Preprimary
RUSSIAN FEDERATION	ISCED 1	D	Primary education (finish grade 4)
RUSSIAN FEDERATION	ISCED 2	D	Basic education (finish grade 9)
RUSSIAN FEDERATION	ISCED 3	D	Secondary general education (finish grade 11)
RUSSIAN FEDERATION	ISCED 4	D	Vocational education (school, technical school, college) (DIG) Primary vocational education (DPG/DSG)
RUSSIAN FEDERATION	ISCED 5A 1st degree	D	Higher education (4 years)
RUSSIAN FEDERATION	ISCED 5A 2nd degree	D	Higher education (5-6 years)
RUSSIAN FEDERATION	ISCED 5B	D	Secondary vocational education (technical school or college)
RUSSIAN FEDERATION	ISCED 6	D	Candidate or Doctor of science (PhD)
SINGAPORE	ISCED 0	D	Kindergarten
SINGAPORE	ISCED 1	D	Primary
SINGAPORE	ISCED 2	D	Lower secondary (DIG) Lower secondary (up to secondary 2) (DPG/DSG)
SINGAPORE	ISCED 3	D	GCE "O" level (DIG) Upper secondary (N level or O level) (DPG/DSG)
SINGAPORE	ISCED 4	D	GCE "A" level / NTC / Nitec (DIG) Post-secondary non-tertiary (e.g., JC / Pre-U / ITE / Certificate in Education) (DPG/DSG)
SINGAPORE	ISCED 5A 1st degree	D	University (first degree) (DIG) Undergraduate level (DEG)
SINGAPORE	ISCED 5A 2nd degree	D	Masters' degree (DIG/DSG/DPG) Postgraduate level (DEG)
SINGAPORE	ISCED 5B	D	Diploma (DIG) Diploma (e.g., polytechnic) (DPG/DSG)
SINGAPORE	ISCED 6	D	Doctorate degree (PhD or EdD)

Country	Item ID	Code	Documentation
SPAIN	ISCED 0	D	Pre-primary education
SPAIN	ISCED 1	D	Primary
SPAIN	ISCED 2	D	Compulsory secondary education
SPAIN	ISCED 3	D	Baccalaureate / vocational education (middle level)
SPAIN	ISCED 4	D	Not applicable
SPAIN	ISCED 5A 1st degree	D	Vocational education (middle or higher level) (DIG-B-02) Certificate or technical engineering (DIG-G-01/03/04/05) Certificate (DEG) Certificate / university Diploma Degree (DPG)
SPAIN	ISCED 5A 2nd degree	D	Diploma degree certificate / technical engineering / graduate degree certificate / higher engineering (DIG-B-02) Graduate degree or higher engineering (DIG-G-01/03/04/05) Graduate degree or engineering (DEG)
SPAIN	ISCED 5B	D	Vocational education (middle or higher level) (DIG/DPG) Non-university qualification (DEG)
SPAIN	ISCED 6	D	Post-graduate / third cycle university studies (Doctorate / Master's degree) (DIG) Doctorate (DEG-A-03) Doctorate or Master's degree (DEG-B-06)
SWITZERLAND	ISCED 0	D	Kindergarten
SWITZERLAND	ISCED 1	D	Primary
SWITZERLAND	ISCED 2	D	Lower secondary level
SWITZERLAND	ISCED 3	D	Upper secondary level (DIG) Upper secondary level: general qualification for university entrance, specialised middle schools, university-entrance diploma on a subject, completion of a professional basic education (apprenticeship), vocational general qualification for university entrance (DPG/DSG)
SWITZERLAND	ISCED 4	D	Matura school for adults or a second vocational education (DIG-B-02) General qualification for university entrance as continuation education in healthcare (duration: minimum 3 years) (DPG/DSG)

Country	Item ID	Code	Documentation
SWITZERLAND	ISCED 5A 1st degree	D	Teacher training college or on a college of higher education (DIG-B-02) Universities of teacher education, colleges of higher education (DIG/DPG/DSG) Bachelor studies at teacher training colleges and technical colleges, Bachelor studies or lower level (DEG)
SWITZERLAND	ISCED 5A 2nd degree	D	Universities incl. ETH (DIG) University, college of higher education, Master Studies in general or Master studies on universities of teacher education (DEG)
SWITZERLAND	ISCED 5B	D	Higher technical / professional education (e.g. federal technical license, diploma) (DIG) Professional education (e.g. federal technical license, diploma) (DPG/DSG)
SWITZERLAND	ISCED 6	D	Promotion or postdoctoral lecture qualification (DIG) Postgraduate training (DEG)
THAILAND	ISCED 0	D	Pre-primary
THAILAND	ISCED 1	D	Primary
THAILAND	ISCED 2	D	Lower secondary
THAILAND	ISCED 3	D	Upper secondary
THAILAND	ISCED 4	D	Post-secondary
THAILAND	ISCED 5A 1st degree	D	Bachelor degree (DIG/DEG) First degree (DPG/DSG)
THAILAND	ISCED 5A 2nd degree	D	Master degree (DIG/DEG) Second degree (DPG/DSG)
THAILAND	ISCED 5B	D	Bachelor degree (tertiary practical / technical) (DIG) Practical training (DPG/DSG)
THAILAND	ISCED 6	D	Doctoral degree
UNITED STATES	ISCED 0	D	Pre-elementary
UNITED STATES	ISCED 1	D	Grade 6 or below

Country	Item ID	Code	Documentation
UNITED STATES	ISCED 2	D	Middle School (DIG) Grades 7-9 (DPG/DSG)
UNITED STATES	ISCED 3	D	High school diploma (DIG) Grade 10-12 (DEG)
UNITED STATES	ISCED 4	D	Vocational certificate (DIG) Vocational or technical certification program (DPG/DSG)
UNITED STATES	ISCED 5A 1st degree	D	Bachelor's Degree (e.g. B.A., B.S.) (DIG) Undergraduate level (DEG)
UNITED STATES	ISCED 5A 2nd degree	D	Post BA-teacher certification, Master's or Professional Degree (e.g. M.A., M.D., D.O., J.D.) (DIG) Postgraduate or masters level (DEG)
UNITED STATES	ISCED 5B	D	Associate's Degree (e.g. A.A., A.S.) or vocational certificate
UNITED STATES	ISCED 6	D	Doctor of philosophy (Ph.D.) (DIG) Doctoral (Ph.D. or Ed.D.) level (DEG)

