

Table SK12-20

Lower secondary mathematics and science teachers who reported various elements included in their formal education and training, by education system: 2018

(Percent)

Education system	Mathematics teachers						Science teachers						OECD country and education system
	Content of some or all subject(s) I teach	Pedagogy of some or all subject(s) I teach	General pedagogy	Classroom practice in some or all subject(s) I teach	Teaching cross-curricular skills (e.g., creativity, critical thinking, problem solving)	Use of information and communications technologies for teaching	Content of some or all subject(s) I teach	Pedagogy of some or all subject(s) I teach	General pedagogy	Classroom practice in some or all subject(s) I teach	Teaching cross-curricular skills (e.g., creativity, critical thinking, problem solving)	Use of information and communications technologies for teaching	
TALIS average ^a	94	90	93	90	70	65	94	90	92	89	70	63	na
Alberta (Canada)	82	87	96	87	74	65	92	93	99	94	80	77	No
Australia	89	92	94	93	66	65	93	93	96	94	65	65	Yes
Austria	94	94	98	96	48	49	98	89	92	94	46	46	Yes
Belgium	88	92	97	95	67	55	84	89	97	91	61	52	Yes
Brazil	95	87	90	94	83	69	94	90	89	95	81	68	No
Bulgaria	95	97	94	96	78	60	98	98	95	97	84	55	No
Chile	92	95	94	94	88	79	94	92	96	94	89	78	Yes
Chinese Taipei	87	90	99	84	64	59	88	89	98	87	64	61	No
Ciudad Autónoma de Buenos Aires (Argentina)	99	97	96	98	88	64	97	84	80	87	89	59	No
Colombia	91	91	91	87	90	79	92	89	93	88	83	75	Yes
Croatia	96	93	98	94	74	63	98	91	94	88	66	54	No
Cyprus	95	77	84	66	72	64	96	79	80	72	76	72	No
Czechia	91	93	99	65	41	49	93	91	97	68	47	50	Yes
Denmark	96	97	100	93	70	61	96	96	99	94	68	57	Yes
England (United Kingdom)	95	95	98	97	73	84	91	93	97	99	66	78	No
Estonia	97	94	99	92	80	61	88	89	96	83	78	60	Yes
Finland	96	94	97	99	49	62	91	94	98	99	50	56	Yes
France	91	73	63	68	42	57	94	74	62	71	38	58	Yes
Georgia	99	90	89	89	68	61	98	90	92	89	72	44	No
Hungary	95	91	97	96	63	54	98	91	97	93	59	62	Yes
Israel	93	93	91	90	70	65	91	92	91	93	65	59	Yes
Italy	91	53	56	83	59	48	89	60	58	80	55	45	Yes
Japan	92	89	86	88	56	63	94	89	91	90	50	61	Yes
Kazakhstan	96	92	97	93	75	76	95	94	97	93	77	76	No
Latvia	95	93	99	94	67	61	96	93	97	93	69	50	Yes

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Lithuania	95	89	99	90	57	51	94	90	97	86	62	40	Yes
Malta	92	95	98	97	76	81	85	84	91	91	71	72	No
Mexico	98	89	85	90	89	80	95	86	77	89	87	72	Yes
Netherlands	95	97	90	97	54	62	91	96	95	95	55	60	Yes
New Zealand	94	96	99	98	70	59	94	95	94	97	57	53	Yes
Norway	95	94	98	80	54	53	94	94	98	83	58	54	Yes
Portugal	93	90	94	82	75	71	96		94	86	73	50	Yes
Romania	97	97	99	95	67	70	97	96	95	95	79	73	No
Russia	99	97	97	96	67	75	98	97	97	93	73	67	No
Saudi Arabia	92	87	92	83	74	67	93	86	94	89	81	79	No
Shanghai (China)	96	95	98	92	68	81	96	95	97	91	76	82	No
Singapore	97	97	98	94	74	91	94	96	98	96	77	91	No
Slovakia	87	87	93	86	57	63	88	89	95	85	68	71	Yes
Slovenia	94	92	97	93	51	62	94	91	98	92	54	65	Yes
South Africa	95	88	94	95	93	62	95	88	91	94	85	70	No
South Korea	94	90	94	91	64	60	97	95	96	94	66	60	Yes
Spain	93	56	56	67	52	48	91	53	58	68	50	37	Yes
Sweden	99	96	96	91	66	41	99	92	94	88	64	43	Yes
Turkey	87	85	93	82	85	77	90	87	94	83	82	78	Yes
United Arab Emirates	97	94	92	94	93	85	95	94	91	93	92	86	No
United States	94	93	97	91	81	65	97	92	92	90	83	67	Yes
Vietnam	100	100	100	99	98	96	100	100	100	95	97	92	No

na = not applicable.

OECD = Organisation for Economic Co-operation and Development; TALIS = Teaching and Learning International Survey.

^a The TALIS average is the average of all education systems listed in the table, with each education system weighted equally.

Note(s):

Lower secondary education in the United States includes grades 7–9. Mathematics and science teachers are identified through teacher reports of the subject taught in their *target class*, which is defined as the first class that teachers taught in their school after 11 a.m. Tuesday in the week before the interview. If a teacher did not teach on Tuesday, the target class can be a class taught on a day following the last Tuesday. Teachers whose target class consisted of entirely or mainly special needs students were not asked about the subject taught in their target class and were, therefore, excluded in the table. The table does not include teachers from Belgium-Flemish and Iceland because the Belgium-Flemish data do not meet international technical standards, and Iceland does not permit secondary data analyses unless the data files are obtained directly from the country.

Source(s):

National Center for Science and Engineering Statistics, special tabulations (2020) of the OECD, TALIS, 2018.

Science and Engineering Indicators