The Science Teaching Survey

2024

ROYAL SOCIETY
OF CHEMISTRY

Contents

Introduction

For the past three years, The Science Teaching Survey has tracked the trends and challenges facing secondary and further education science teachers.

The survey enables us to monitor changes in critical areas like staffing and professional development. We also explore current topics in education: this year, we asked teachers about artificial intelligence and how they use it in their work.
We are deeply grateful to the 1,846 science teachers and technicians who shared their experiences with us in 2024.

About the survey

The survey is led by the Royal Society of Chemistry and supported by the Institute of Physics (IOP) and the Royal Society of Biology (RSB).

Science teachers and technicians in secondary and further education (FE) completed the survey in April 2024.

Here is the breakdown of survey participants by nation and job role:
England: 78%
Scotland: 14%
Wales: 4%
Northern Ireland: 3%
Republic of Ireland: 2%

Classroom teacher: 46%
Head of department: 32%
Science technician: 14%
Other staff member with science teaching responsibilities: 7%
FE lecturer of science: 2%

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Section A: About you and your school

Table A1: Which of the following describes the school where you work?

	%
Academy (standalone) + Academy (in a MAT)	41%
Further education college	5%
Grammar school/selective school (any type of state school with selective admissions)	5%
Local authority, Community, Foundation, or ETB	29%
Other type of school	2%
Private/independent school	16%
Special School	2%
Column n	1846

Total sample; Unweighted; base n = 1846

Table A2: Where is your school based?

	%
England	78%
Scotland	14%
Wales	4%
Northern Ireland	3%
Republic of Ireland	2%
Column n	1846

Total sample; Unweighted; base n = 1846

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

A3: Please describe the staffing at your school

Staff shortages in school science departments is an urgent issue. Understaffing puts pressure on existing staff and threatens the high quality education that teachers and technicians work hard to provide.

The data from 2024 shows an increase in understaffing for biology teachers and a sharp decline in science technician support. The situation for chemistry and physics teachers has also deteriorated, but the numbers don't indicate a rapid shift just yet. We will continue to track understaffing through The Science Teaching Survey.

Table A3i: Full data

	Biology teachers	Chemistry teachers	Physics teachers	Science technicians
Overstaffed	16%	3%	2%	1%
Adequately staffed	66%	62%	48%	56%
Understaffed	16%	33%	47%	39%
Don't know / Not sure	2%	1%	2%	1%
Not applicable	1%	1%	1%	2%
Column n	1846	1846	1846	1846

Total sample; Unweighted; base n = 1846

Table A3ii: UNDERSTAFFING cut by school type

School type	Biology teachers	Chemistry teachers	Physics teachers	Science technicians
Mainstream state secondary schools	16%	36%	53%	42%
Private/independent school	12%	15%	22%	24%
Further education college	19%	33%	44%	35%
Other type of school	22%	38%	42%	50%
Column n				

Total sample; Unweighted; base n = 1846

Table A3iii: Biology staffing cut by nation

	Biology teachers				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	17%	10%	13%	17%	13%
Adequately staffed	64%	70%	76%	66%	67%
Understaffed	16%	14%	11%	17%	20%
Don't know / Not sure	1%	5%	0%	0%	0%
Not applicable	1%	0%	0%	0%	0%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A3iv: Chemistry staffing cut by nation

	Chemistry teachers				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	3%	5%	6%	2%	2%
Adequately staffed	61%	70%	62%	47%	62%
Understaffed	34%	21%	31%	51%	31%
Don't know / Not sure	1%	4%	1%	0%	2%
Not applicable	1%	0%	0%	0%	2%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

Table A3v: Physics staffing cut by nation

	Physics teachers				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	2%	3%	0%	0%	2%
Adequately staffed	45%	65%	51%	47%	58%
Understaffed	51%	27%	49%	53%	36%
Don't know / Not sure	2%	6%	0%	0%	0%
Not applicable	1%	0%	0%	0%	4%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

Table A3vi: Science technician staffing cut by nation

	Science technicians				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	1%	1%	0%	0%	0%
Adequately staffed	59%	49%	45%	55%	13%
Understaffed	37%	47%	54%	43%	40%
Don't know / Not sure	1%	3%	1%	2%	2%
Not applicable	2%	0%	0%	0%	44%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A3vii: Biology staffing cut by nation (mainstream and special schools)

	Biology teachers				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	20%	10%	16%	13%	10%
Adequately staffed	61%	70%	71%	72%	77%
Understaffed	17%	14%	13%	16%	13%
Don't know / Not sure	1%	5%	0%	0%	0%
Not applicable	1%	0%	0%	0%	0%
Column n	1091	220	56	32 ¥	30 ¥

Filter: Mainstream State + Special School; Unweighted; base n = 1429; 23% filtered out

Table A3viii: Chemistry staffing cut by nation (mainstream and special schools)

	Chemistry teachers				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	3%	4%	5%	3%	3%
Adequately staffed	56%	70%	55%	59%	57%
Understaffed	39%	22%	38%	38%	33%
Don't know / Not sure	1%	4%	2%	0%	3%
Not applicable	1%	0%	0%	0%	3%
Column n	1091	220	56	32 ¥	30 ¥

Filter: Mainstream State + Special School; Unweighted; base n = 1429; 23% filtered out

Table A3ix: Physics staffing cut by nation (mainstream and special schools)

	Physics teachers				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	1%	3%	0%	0%	3%
Adequately staffed	38%	64%	43%	56%	50%
Understaffed	58%	28%	57%	44%	43%
Don't know / Not sure	2%	5%	0%	0%	0%
Not applicable	1%	0%	0%	0%	3%
Column n	1091	220	56	32 ¥	30 ¥

Filter: Mainstream State + Special School; Unweighted; base n = 1429; 23% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A3x: Science technician staffing cut by nation (mainstream and special schools)

| | Science technicians | | | | |
| | NATION | | | | |
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	1%	1%	0%	0%	0%
Adequately staffed	57%	47%	38%	53%	10%
Understaffed	41%	49%	61%	44%	33%
Don't know / Not sure	1%	3%	2%	3%	3%
Not applicable	1%	0%	0%	0%	53%
Column n	1091	220	56	32 ¥	30 ¥

Filter: Mainstream State + Special School; Unweighted; base n = 1429; 23% filtered out

Table A3xi: UNDERSTAFFING cut by FSM%

FSM% (UK only)	Biology teachers	Chemistry teachers	Physics teachers	Science technicians	Column n
30% or above	17%	44%	60%	45%	97
Less than 30%	15%	34%	53%	42%	785

Filter: MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 1028 to 1067; total n = 1395; 367 missing; 24% filtered out

Table A4: Which of the following best describes your current job role?

	%
Classroom teacher of science, biology, chemistry and/or physics	46%
FE lecturer of science, biology, chemistry and/or physics	2%
Head of department/principal teacher – Biology	2%
Head of department/principal teacher – Chemistry	12%
Head of department/principal teacher – Physics	4%
Head of department/principal teacher – Science	14%
Other staff member with science teaching responsibilities, e.g. SLT	7%
Science technician	14%
Column n	1846

Total sample; Unweighted; base n = 1846

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A5: For which of these subjects, if any, would you define yourself as a specialist?

	%
Biology	30%
Chemistry	53%
Physics	21%
General Science	28%
None of the above	0%
Don't know / Not sure	0%
Column n	1586

Total sample; Unweighted; base n = 1846

Table A6: For each of the key stages that you teach, how confident are you in teaching biology subject content to these key stages? EWNI

Column %	Biology at KS3	Biology at KS4	Biology at KS5
Very confident	64%	42%	15%
Somewhat confident	13%	20%	9%
Neither confident nor unconfident	2%	4%	4%
Somewhat unconfident	2%	6%	6%
Very unconfident	3%	3%	12%
Do not teach	17%	25%	54%
T2B (Very confident + Somewhat confident)	77%	61%	24%
B2B (Somewhat unconfident + Very unconfident)	4%	9%	18%
Column n	1358	1358	1358

Filter: Teachers AND EWNI; Unweighted; base n = 1358

Table A7: For each of the key stages that you teach, how confident are you in teaching chemistry subject content to these key stages? EWNI

Column %	Chemistry at KS3	Chemistry at KS4	Chemistry at KS5
Very confident	77%	65%	36%
Somewhat confident	8%	16%	13%
Neither confident nor unconfident	1%	2%	4%
Somewhat unconfident	1%	3%	5%
Very unconfident	3%	3%	9%
Do not teach	11%	11%	33%
T2B (Very confident + Somewhat confident)	85%	80%	49%
B2B (Somewhat unconfident + Very unconfident)	3%	6%	14%
Column n	1358	1358	1358

Filter: Teachers AND EWNI; Unweighted; base n = 1358

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A8: For each of the key stages that you teach, how confident are you in teaching physics subject content to these key stages? EWNI

Column %	Physics at KS3	Physics at KS4	Physics at KS5
Very confident	58%	34%	11%
Somewhat confident	18%	26%	6%
Neither confident nor unconfident	3%	7%	4%
Somewhat unconfident	3%	7%	7%
Very unconfident	2%	3%	17%
Do not teach	16%	23%	56%
T2B (Very confident + Somewhat confident)	77%	60%	17%
B2B (Somewhat unconfident + Very unconfident)	5%	10%	24%
Column n	1358	1358	1358

Filter: Teachers AND EWNI; Unweighted; base n = 1358

Table A9: For each of the levels that you teach, how confident are you in teaching biology subject content to these levels? SCOT

Column %	Biology at N4	Biology at N5	Biology at Higher	Human Biology at Higher	Biology at Advanced Higher
Very confident	21%	25%	14%	11%	8%
Somewhat confident	5%	4%	5%	5%	8%
Neither confident nor unconfident	2%	2%	1%	2%	2%
Somewhat unconfident	3%	1%	4%	2%	3%
Very unconfident	1%	1%	2%	3%	5%
Do not teach	69%	67%	73%	77%	74%
Very confident + Somewhat confident	26%	28%	20%	17%	16%
Somewhat unconfident + Very unconfident	3%	2%	6%	5%	8%
Column n	183	183	183	183	183

Filter: Teachers AND Scotland; Unweighted; base n = 183

Table A10: For each of the levels that you teach, how confident are you in teaching chemistry subject content to these levels? SCOT

Column %	Chemistry at N4	Chemistry at N5	Chemistry at Higher	Chemistry at Advanced Higher
Very confident	38%	49%	36%	19%
Somewhat confident	10%	4%	9%	9%
Neither confident nor unconfident	3%	2%	2%	5%
Somewhat unconfident	2%	1%	3%	5%
Very unconfident	3%	3%	5%	9%
Do not teach	43%	41%	45%	53%
Very confident + Somewhat confident	49%	52%	45%	28%
Somewhat unconfident + Very unconfident	5%	4%	8%	14%
Column n	183	183	183	183

Filter: Teachers AND Scotland; Unweighted; base n = 183

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A11: For each of the levels that you teach, how confident are you in teaching physics subject content to these levels? SCOT

Column %	Physics at N4	Physics at N5	Physics at Higher	Physics at Advanced Higher
Very confident	31%	35%	28%	11%
Somewhat confident	6%	2%	6%	10%
Neither confident nor unconfident	2%	2%	1%	3%
Somewhat unconfident	3%	1%	1%	6%
Very unconfident	1%	3%	4%	6%
Do not teach	58%	57%	60%	63%
Very confident + Somewhat confident	37%	37%	34%	22%
Somewhat unconfident + Very unconfident	4%	4%	5%	12%
Column n	183	183	183	183

Filter: Teachers AND Scotland; Unweighted; base n = 183

Table A12a: For each of the levels that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these key stages? IRE

Column %	Junior Cycle Biological World	Junior Cycle Chemical World	Junior Cycle Physical World	Junior Cycle Earth and Space	Transition Year Science
Very confident	67%	69%	53%	38%	33%
Somewhat confident	18%	18%	24%	31%	33%
Neither confident nor unconfident	2%	0%	9%	7%	2%
Somewhat unconfident	0%	0%	2%	16%	7%
Very unconfident	9%	9%	7%	4%	4%
Do not teach	4%	4%	4%	4%	20%
Very confident + Somewhat confident	84%	87%	78%	69%	67%
Somewhat unconfident + Very unconfident	9%	9%	9%	20%	11%
Column n	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥

Filter: Teachers AND ROI; Unweighted; base n = 45

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A12b: For each of the levels that you teach, how confident are you in teaching <u>biology, chemistry and/or physics</u> subject content to these key stages? IRE

Column %	Leaving Cert Biology	Leaving Cert Ag Science	Leaving Cert Chemistry	Leaving Cert Physics	Leaving Cert Chem and Physics	Leaving Cert Computer Science
Very confident	33%	9%	42%	16%	0%	2%
Somewhat confident	13%	2%	4%	9%	7%	4%
Neither confident nor unconfident	4%	7%	7%	7%	7%	7%
Somewhat unconfident	4%	4%	7%	0%	2%	0%
Very unconfident	9%	7%	9%	4%	2%	0%
Do not teach	36%	71%	31%	64%	82%	87%
Very confident + Somewhat confident	47%	11%	47%	24%	7%	7%
Somewhat unconfident + Very unconfident	13%	11%	16%	4%	4%	0%
Column n	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥

Filter: Teachers AND ROI; Unweighted; base n = 45

Table A13: Do you feel you are able to make an impact on young people's lives through your teaching?

	%
Yes, sometimes	49%
Yes, regularly	45%
Rarely	6%
Never	0%
Don't know / Not sure	1%
Column n	1586

Filter: Teachers; Unweighted; base n = 1586

Table A14: Including the current academic year, how many years have you been teaching the sciences?

	%
1-2 YRS	7%
3-4 YRS	9%
5-9 YRS	18%
10+ YRS	67%
Column n	1586

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A15: Including the current academic year, how many years have you been working as a science technician?

	%
1-2 YRS	18%
3-4 YRS	12%
5-9 YRS	18%
10+ YRS	52%
Column n	260

Filter: Technicians; Unweighted; base n = 260

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A16: On a scale of 0 to 10, where '0' is not satisfied at all and '10' is completely satisfied, how satisfied are you with your job as a teacher?

	%
10- Completely satisfied	4%
9	7%
8	22%
7	21%
6	16%
5 - Neither satisfied nor dissatisfied	6%
4	8%
3	8%
2	5%
1	1%
0- Not satisfied at all	1%
Top 4 (7-10)	54%
Bottom 4 (0-3)	16%
Column n	1586

Filter: Teachers; Unweighted; base n = 1586

Table A17: On a scale of 0 to 10, where '0' is not satisfied at all and '10' is completely satisfied, how satisfied are you with your job as a technician?

	%
10- Completely satisfied	8%
9	10%
8	30%
7	20%
6	10%
5 - Neither satisfied nor dissatisfied	8%
4	5%
3	5%
2	2%
1	0%
0- Not satisfied at all	1%
Top 4 (7-10)	68%
Bottom 4 (0-3)	9%
Column n	260

Filter: Technicians; Unweighted; base n = 260

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table A18: Mental wellbeing score: Teachers

	%
High wellbeing (28 or greater)	12%
Moderate wellbeing (20 - 27)	64%
Low wellbeing (Less than 20)	24%
Column n	1846

Total sample; Unweighted; base n = 1846

Table A19: Mental wellbeing score: Technicians

	%
High wellbeing (28 or greater)	17%
Moderate wellbeing (20 - 27)	65%
Low wellbeing (Less than 20)	19%
Column n	260

Filter: Technicians; Unweighted; base n = 260

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Section B: Detrimental effects

In 2024, teachers shared that the biggest challenges impacting student learning outcomes are:
1. Not enough non-contact time
2. An overloaded curriculum
3. Insufficient school funding

The picture is complex, and other challenges exist, like insufficient support for students with special education needs and disabilities (SEND). Some schools have reached a crisis point, which has been widely reported in the media.

A lack of specialist science teachers and technicians continues to be of concern. The 2022 survey revealed that over half of the participating schools experienced understaffing of science subject specialists.

B1: In your own experience, which (if any) of these factors have had a detrimental effect on student learning outcomes in the last year (since March 2023)?

Table B1i: Full data

	%
Insufficient school funding	61%
Lack of specialist teachers within the sciences	39%
Lack of science technicians	34%
An overloaded curriculum	69%
An out of date/irrelevant curriculum	28%
Insufficient support for student special educational needs and disabilities (SEND)	48%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	77%
None of the above	2%
Column n	1579

Filter: Teachers; Unweighted; base n = 1586

Table B1ii: Cut by school type

	SCHOOL TYPE			
	Mainstream state secondary schools	**Private/independent school**	**Further education college**	**Other type of school**
Insufficient school funding	71%	21%	49%	49%
Lack of specialist teachers within the sciences	43%	20%	34%	37%
Lack of science technicians	36%	22%	30%	54%
An overloaded curriculum	72%	62%	59%	54%
An out of date/irrelevant curriculum	29%	23%	31%	23%
Insufficient support for student special educational needs and disabilities (SEND)	53%	29%	34%	50%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	81%	62%	76%	69%
None of the above	1%	9%	0%	6%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

B1: In your own experience, which (if any) of these factors have had a detrimental effect on student learning outcomes in the last year (since March 2023)?

Table B1iii: Cut by nation

	NATION					
	England	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**	**All nations %**
Insufficient school funding	60%	63%	73%	57%	44%	61%
Lack of specialist teachers within the sciences	43%	16%	37%	41%	18%	39%
Lack of science technicians	32%	38%	42%	43%	64%	34%
An overloaded curriculum	71%	66%	58%	65%	60%	69%
An out of date/irrelevant curriculum	30%	23%	18%	22%	9%	28%
Insufficient support for student special educational needs and disabilities (SEND)	48%	64%	45%	30%	24%	48%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	77%	75%	82%	83%	78%	77%
None of the above	3%	1%	0%	2%	0%	2%
Column n	1250	183	62	46 ¥	45 ¥	1579

Filter: Teachers; Unweighted; base n = 1586

Table B1iv: Cut by FSM%

	FSM% (UK only)	
	30% or above	**Less than 30%**
Insufficient school funding	67%	74%
Lack of specialist teachers within the sciences	43%	44%
Lack of science technicians	41%	34%
An overloaded curriculum	78%	71%
An out of date/irrelevant curriculum	29%	29%
Insufficient support for student special educational needs and disabilities (SEND)	57%	54%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	85%	81%
None of the above	1%	1%
Column n	97	785

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = 1185

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

B1: In your own experience, which (if any) of these factors have had a detrimental effect on student learning outcomes in the last year (since March 2023)?

Table B1v: Cut by FSM (England only)

	FSM% (England only)	
Column %	**Less than 30%**	**30% or above**
Insufficient school funding	74%	66%
Lack of specialist teachers within the sciences	48%	48%
Lack of science technicians	33%	37%
An overloaded curriculum	74%	79%
An out of date/irrelevant curriculum	30%	32%
Insufficient support for student special educational needs and disabilities (SEND)	53%	53%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	82%	84%
None of the above	1%	1%
Column n	640	73

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

Table B1vi: Cut by FSM (Scotland only)

	FSM% (Scotland only)	
Column %	**Less than 30%**	**30% or above**
Insufficient school funding	72%	50%
Lack of specialist teachers within the sciences	17%	17%
Lack of science technicians	37%	50%
An overloaded curriculum	60%	83%
An out of date/irrelevant curriculum	22%	33%
Insufficient support for student special educational needs and disabilities (SEND)	63%	83%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	74%	83%
None of the above	0%	0%
Column n	106	12 ¥

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table B1vii: Cut by FSM (Wales only)

	FSM% (UK only)	
Column %	Less than 30%	30% or above
Insufficient school funding	71%	100%
Lack of specialist teachers within the sciences	50%	38%
Lack of science technicians	50%	63%
An overloaded curriculum	46%	75%
An out of date/irrelevant curriculum	14%	0%
Insufficient support for student special educational needs and disabilities (SEND)	46%	75%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	75%	88%
None of the above	0%	0%
Column n	28 ¥	8 ¥

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

Table B1viii: Cut by FSM (Northern Ireland only)

	FSM% (UK only)	
Column %	Less than 30%	30% or above
Insufficient school funding	64%	75%
Lack of specialist teachers within the sciences	36%	50%
Lack of science technicians	55%	50%
An overloaded curriculum	64%	50%
An out of date/irrelevant curriculum	27%	25%
Insufficient support for student special educational needs and disabilities (SEND)	27%	0%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	91%	100%
None of the above	9%	0%
Column n	11 ¥	4 ¥

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

Table B1iv: Cut by years of teaching

	YEARS OF TEACHING			
	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS
Insufficient school funding	59%	60%	63%	60%
Lack of specialist teachers within the sciences	37%	42%	44%	37%
Lack of science technicians	30%	31%	36%	34%
An overloaded curriculum	70%	68%	69%	69%
An out of date/irrelevant curriculum	34%	27%	24%	28%
Insufficient support for student special educational needs and disabilities (SEND)	52%	50%	50%	47%
Not enough non-contact time (e.g. for planning, marking, practicing practical work)	86%	79%	81%	75%
None of the above	1%	1%	2%	3%
Column n	105	136	278	1067

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Section C: Professional development

We remain concerned about the low proportion of science teachers who feel they receive enough professional development (PD). We reported on inadequate PD in the 2022 survey and its link with teachers considering leaving the profession.

C1: Thinking about the last 12 months (since March 2023), please indicate the number of hours of subject specific professional development that you received across all the subjects that you teach

Table C1i: Full data.

	%
0 hrs - Didn't access any professional development	33%
Up to 5 hours	30%
5 - 9 hours	16%
10 – 14 hours	10%
15 – 19 hours	3%
20 - 24 hours	4%
25 - 29 hours	0%
30 - 35 hours	1%
35+ hours	2%
Column n	1586

Filter: Teachers; Unweighted; base n = 1586

Table C1ii: Cut by school type

	SCHOOL TYPE			
Column %	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
0 hrs - Didn't access any professional development	32%	36%	39%	39%
Up to 5 hours	31%	33%	24%	13%
5 - 9 hours	17%	12%	16%	21%
10 – 14 hours	10%	8%	11%	11%
15 – 19 hours	3%	4%	3%	3%
20 - 24 hours	3%	5%	1%	6%
25 - 29 hours	1%	0%	1%	0%
30 - 35 hours	2%	0%	1%	1%
35+ hours	2%	2%	3%	4%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C1: Thinking about the last 12 months (since March 2023), please indicate the number of hours of subject specific professional development that you received across all the subjects that you teach

Table C1iii: Cut by nation

	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
0 hrs - Didn't access any professional development	35%	19%	47%	54%	9%
Up to 5 hours	32%	17%	27%	24%	31%
5 - 9 hours	15%	26%	13%	11%	29%
10 – 14 hours	8%	16%	10%	9%	13%
15 – 19 hours	3%	6%	0%	2%	4%
20 - 24 hours	3%	5%	3%	0%	9%
25 - 29 hours	0%	1%	0%	0%	0%
30 - 35 hours	1%	5%	0%	0%	0%
35+ hours	2%	5%	0%	0%	4%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586

Table C1iv: Cut by FSM%

	FSM% (UK only)	
Column %	30% or above	Less than 30%
0 hrs - Didn't access any professional development	34%	32%
Up to 5 hours	30%	31%
5 - 9 hours	12%	18%
10 – 14 hours	8%	9%
15 – 19 hours	6%	3%
20 - 24 hours	5%	3%
25 - 29 hours	0%	1%
30 - 35 hours	3%	2%
35+ hours	1%	2%
Column n	97	785

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = 1185

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C1: Thinking about the last 12 months (since March 2023), please indicate the number of hours of subject specific professional development that you received across all the subjects that you teach

Table C1v: Cut by FSM% (England only)

Column %	FSM% (England only)	
	Less than 30%	30% or above
0 hrs - Didn't access any professional development	33%	30%
Up to 5 hours	34%	30%
5 - 9 hours	17%	12%
10 – 14 hours	8%	10%
15 – 19 hours	3%	7%
20 - 24 hours	3%	5%
25 - 29 hours	1%	0%
30 - 35 hours	1%	4%
35+ hours	1%	1%
Column n	640	73

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

Table C1vi: Cut by FSM% (Scotland only)

Column %	FSM% (Scotland only)	
	Less than 30%	30% or above
0 hrs - Didn't access any professional development	18%	33%
Up to 5 hours	11%	25%
5 - 9 hours	28%	17%
10 – 14 hours	19%	8%
15 – 19 hours	7%	8%
20 - 24 hours	5%	8%
25 - 29 hours	0%	0%
30 - 35 hours	7%	0%
35+ hours	6%	0%
Column n	106	12 ¥

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C1: Thinking about the last 12 months (since March 2023), please indicate the number of hours of subject specific professional development that you received across all the subjects that you teach

Table C1vii: Cut by FSM% (Wales only)

Column %	FSM% (UK only)	
	Less than 30%	30% or above
0 hrs - Didn't access any professional development	36%	63%
Up to 5 hours	36%	25%
5 - 9 hours	11%	13%
10 – 14 hours	11%	0%
15 – 19 hours	0%	0%
20 - 24 hours	7%	0%
25 - 29 hours	0%	0%
30 - 35 hours	0%	0%
35+ hours	0%	0%
Column n	28 ¥	8 ¥

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

Table C1viii: Cut by FSM% (Northern Ireland only)

Column %	FSM% (Northern Ireland only)	
	Less than 30%	30% or above
0 hrs - Didn't access any professional development	55%	50%
Up to 5 hours	18%	50%
5 - 9 hours	27%	0%
10 – 14 hours	0%	0%
15 – 19 hours	0%	0%
20 - 24 hours	0%	0%
25 - 29 hours	0%	0%
30 - 35 hours	0%	0%
35+ hours	0%	0%
Column n	11¥	4 ¥

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = from 882 to 918; total n = 1185; 303 missing; 36% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C1: Thinking about the last 12 months (since March 2023), please indicate the number of hours of subject specific professional development that you received across all the subjects that you teach

Table C1v: Cut by years of teaching

	YEARS OF TEACHING			
Column %	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS
0 hrs - Didn't access any professional development	16%	28%	28%	37%
Up to 5 hours	36%	26%	35%	29%
5 - 9 hours	19%	18%	18%	15%
10 – 14 hours	11%	13%	9%	9%
15 – 19 hours	4%	4%	2%	4%
20 - 24 hours	6%	8%	4%	3%
25 - 29 hours	1%	0%	1%	0%
30 - 35 hours	5%	1%	1%	1%
35+ hours	2%	1%	3%	2%
Column n	105	136	278	1067

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C2: Thinking again about the last 12 months (since March 2023). Was the amount of time that you undertook subject specific professional development for each subject...?

Table C2i: Full data

Column %	Biology	Chemistry	Physics	General Science	Non-science subjects
Sufficient	6%	14%	9%	8%	9%
Somewhat sufficient	7%	12%	8%	8%	6%
Neither sufficient nor insufficient	11%	12%	10%	13%	6%
Somewhat insufficient	9%	11%	8%	10%	4%
Insufficient	30%	34%	29%	28%	14%
Don't know / Can't remember	3%	3%	3%	4%	3%
Not applicable – don't teach this subject	34%	14%	32%	28%	58%
Sufficient + Somewhat sufficient	13%	26%	18%	16%	14%
Somewhat insufficient + Insufficient	39%	45%	38%	38%	18%
Column n	1586	1586	1586	1586	1586

Filter: Teachers; Unweighted; base n = 1586

Table C2ii: Biology cut by school type

	Biology			
	SCHOOL TYPE			
Column %	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
Sufficient	7%	3%	10%	7%
Somewhat sufficient	7%	7%	4%	7%
Neither sufficient nor insufficient	12%	6%	6%	19%
Somewhat insufficient	10%	5%	3%	9%
Insufficient	34%	14%	19%	34%
Don't know / Can't remember	4%	1%	1%	0%
Not applicable – don't teach this subject	27%	64%	57%	23%
T2B (Sufficient + Somewhat sufficient)	14%	10%	14%	14%
B2B (Somewhat insufficient + Insufficient)	44%	19%	21%	43%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C2: Thinking again about the last 12 months (since March 2023). Was the amount of time that you undertook subject specific professional development for each subject...?

Table C2iii: Chemistry cut by school type

Column %	Chemistry			
	SCHOOL TYPE			
	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
Sufficient	12%	21%	17%	14%
Somewhat sufficient	11%	14%	16%	9%
Neither sufficient nor insufficient	12%	13%	11%	14%
Somewhat insufficient	12%	7%	6%	10%
Insufficient	37%	23%	30%	41%
Don't know / Can't remember	4%	0%	1%	1%
Not applicable – don't teach this subject	13%	22%	19%	9%
T2B (Sufficient + Somewhat sufficient)	23%	35%	33%	23%
B2B (Somewhat insufficient + Insufficient)	48%	30%	36%	51%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

Table C2iv: Physics cut by school type

Column %	Physics			
	SCHOOL TYPE			
	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
Sufficient	10%	7%	7%	10%
Somewhat sufficient	9%	6%	3%	10%
Neither sufficient nor insufficient	10%	9%	0%	11%
Somewhat insufficient	9%	7%	0%	10%
Insufficient	32%	16%	16%	41%
Don't know / Can't remember	4%	1%	3%	3%
Not applicable – don't teach this subject	26%	54%	71%	13%
T2B (Sufficient + Somewhat sufficient)	19%	12%	10%	20%
B2B (Somewhat insufficient + Insufficient)	41%	23%	16%	51%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C2: Thinking again about the last 12 months (since March 2023). Was the amount of time that you undertook subject specific professional development for each subject...?

Table C2v: Biology cut by nation

Column %	Biology				
	NATION				
	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	7%	4%	5%	4%	2%
Somewhat sufficient	6%	8%	11%	2%	11%
Neither sufficient nor insufficient	12%	5%	6%	22%	7%
Somewhat insufficient	10%	3%	6%	11%	7%
Insufficient	33%	10%	40%	35%	16%
Don't know / Can't remember	4%	2%	0%	0%	4%
Not applicable – don't teach this subject	29%	67%	31%	26%	53%
Sufficient + Somewhat sufficient	13%	13%	16%	7%	13%
Somewhat insufficient + Insufficient	42%	13%	47%	46%	22%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586

Table C2vi: Chemistry cut by nation

Column %	Chemistry				
	NATION				
	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	15%	10%	15%	13%	11%
Somewhat sufficient	11%	18%	3%	13%	13%
Neither sufficient nor insufficient	14%	7%	8%	11%	9%
Somewhat insufficient	12%	5%	6%	15%	7%
Insufficient	36%	16%	55%	39%	20%
Don't know / Can't remember	3%	2%	0%	0%	4%
Not applicable – don't teach this subject	10%	42%	13%	9%	36%
Sufficient + Somewhat sufficient	26%	28%	18%	26%	24%
Somewhat insufficient + Insufficient	48%	21%	61%	54%	27%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C2: Thinking again about the last 12 months (since March 2023). Was the amount of time that you undertook subject specific professional development for each subject...?

Table C2vii: Physics cut by nation

	Physics				
	NATION				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	10%	10%	3%	2%	7%
Somewhat sufficient	8%	10%	6%	4%	2%
Neither sufficient nor insufficient	11%	5%	8%	9%	7%
Somewhat insufficient	9%	4%	8%	9%	0%
Insufficient	32%	9%	34%	39%	16%
Don't know / Can't remember	3%	2%	0%	2%	2%
Not applicable – don't teach this subject	26%	60%	40%	35%	67%
Sufficient + Somewhat sufficient	18%	20%	10%	7%	9%
Somewhat insufficient + Insufficient	41%	14%	42%	48%	16%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586

Table C2viii: Cut by FSM%

	BIOLOGY		CHEMISTRY		PHYSICS	
	FSM% (UK only)		FSM% (UK only)		FSM% (UK only)	
Column %	30% or above	Less than 30%	30% or above	Less than 30%	30% or above	Less than 30%
Sufficient	7%	6%	9%	13%	8%	11%
Somewhat sufficient	9%	6%	9%	10%	11%	8%
Neither sufficient nor insufficient	11%	11%	14%	12%	5%	11%
Somewhat insufficient	11%	10%	15%	12%	13%	9%
Insufficient	41%	35%	44%	37%	42%	33%
Don't know / Can't remember	3%	4%	2%	4%	3%	4%
Not applicable – don't teach this subject	16%	29%	5%	12%	16%	24%
Sufficient + Somewhat sufficient	16%	12%	19%	23%	20%	20%
Somewhat insufficient + Insufficient	53%	44%	60%	49%	56%	42%
Column n	97	785	97	785	97	785

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = 1185

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

C2: Thinking again about the last 12 months (since March 2023). Was the amount of time that you undertook subject specific professional development for each subject...?

Table C2ix: Cut by years of teaching

Column %	Biology				Chemistry				Physics			
	YEARS OF TEACHING				YEARS OF TEACHING				YEARS OF TEACHING			
	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS
Sufficient	10%	9%	6%	6%	18%	14%	9%	15%	13%	7%	10%	9%
Somewhat sufficient	10%	8%	8%	6%	13%	16%	16%	10%	12%	19%	7%	7%
Neither sufficient nor insufficient	10%	10%	13%	10%	10%	10%	10%	14%	8%	9%	8%	11%
Somewhat insufficient	13%	10%	12%	7%	15%	10%	15%	9%	8%	10%	15%	6%
Insufficient	30%	31%	29%	30%	30%	30%	32%	36%	30%	28%	30%	30%
Don't know / Can't remember	8%	1%	5%	2%	7%	2%	4%	2%	8%	1%	5%	2%
Not applicable – don't teach this subject	18%	31%	27%	39%	7%	17%	14%	15%	22%	26%	25%	35%
Sufficient + Somewhat sufficient	21%	17%	14%	11%	31%	30%	25%	25%	26%	26%	17%	16%
Somewhat insufficient + Insufficient	44%	40%	41%	37%	46%	40%	47%	45%	37%	38%	45%	36%
Column n	105	136	278	1067	105	136	278	1067	105	136	278	1067

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Section D: Assessment

Our 2024 data on assessment shows marked differences on various issues around the assessment of science between the nations of the UK and Ireland. 62% of teachers in England favour the return of modular examinations and 30% of teachers wish to see more alternative modes of assessment, such as coursework. Teachers in Wales and Northern Ireland show a strong preference for the assessment methods currently utilised in their nations and (alongside Ireland) are much more supportive of an externally assessed practical exam compared to teachers in England and Scotland.

The majority (67%) of responding teachers in England, Wales and Northern Ireland agree with tiering in science assessments. Teachers based in schools with over 30% FSM show a stronger preference for non-examined assessments (NEA) such as practical assessment and coursework. There is low support across the nations for the introduction of an oral exam in the sciences. There are also indications for all the nations that multiple methods of practical assessment would be welcomed, with only 6% of teachers stating that practical work should not be assessed.

D1: How do you think the sciences should be assessed at age 16?

Table D1i: Full data

	%
Written exam - terminal	53%
Written exam – modular	62%
Controlled assessment/coursework (marked by teacher)	18%
Controlled assessment/coursework (marked externally)	34%
Oral exam	10%
Practical exam (marked by teacher)	30%
Practical exam (marked externally)	35%
Don't know/Not sure	3%
Column n	1566

Filter: Teachers; Unweighted; base n = 1586

Table D1ii: Cut by school type

	SCHOOL TYPE			
Column %	**Mainstream state secondary schools**	**Private/independent school**	**Further education college**	**Other type of school**
Written exam - terminal	51%	64%	54%	37%
Written exam – modular	64%	51%	63%	64%
Controlled assessment/coursework (marked by teacher)	17%	15%	30%	27%
Controlled assessment/coursework (marked externally)	36%	24%	37%	44%
Oral exam	9%	9%	14%	19%
Practical exam (marked by teacher)	29%	27%	40%	41%
Practical exam (marked externally)	34%	33%	44%	37%
Don't know/Not sure	3%	2%	1%	4%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

D1: How do you think the sciences should be assessed at age 16?

Table D1iii: Cut by nation

Column %	NATION				
	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Written exam - terminal	52%	66%	35%	35%	73%
Written exam – modular	62%	58%	73%	83%	40%
Controlled assessment/coursework (marked by teacher)	18%	22%	13%	15%	11%
Controlled assessment/coursework (marked externally)	30%	52%	42%	39%	60%
Oral exam	10%	7%	16%	4%	4%
Practical exam (marked by teacher)	30%	35%	13%	26%	11%
Practical exam (marked externally)	31%	30%	76%	74%	60%
Don't know/Not sure	4%	2%	2%	0%	0%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586

Table D1iv: Cut by FSM%

Column %	FSM% (UK only)	
	30% or above	Less than 30%
Written exam - terminal	48%	53%
Written exam – modular	66%	63%
Controlled assessment/coursework (marked by teacher)	15%	17%
Controlled assessment/coursework (marked externally)	41%	34%
Oral exam	8%	9%
Practical exam (marked by teacher)	36%	29%
Practical exam (marked externally)	38%	33%
Don't know/Not sure	1%	4%
Column n	97	785

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = 1185

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

D1: How do you think the sciences should be assessed at age 16?

Table D1v: Cut by years of teaching

	YEARS OF TEACHING			
Column %	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS
Written exam - terminal	46%	51%	45%	56%
Written exam – modular	64%	57%	69%	60%
Controlled assessment/coursework (marked by teacher)	29%	24%	18%	16%
Controlled assessment/coursework (marked externally)	43%	40%	41%	31%
Oral exam	17%	17%	13%	7%
Practical exam (marked by teacher)	41%	45%	37%	25%
Practical exam (marked externally)	31%	34%	35%	35%
Don't know/Not sure	7%	4%	4%	2%
Column n	105	136	278	1067

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

D2: How do you think practical skills should be assessed at age 16?

Table D2i: Full data

	%
Written exam questions based on a series of required practical activities	54%
Demonstrating competency	54%
Practical exam	43%
Practical skills should not be assessed	6%
Don't know/Not sure	1%
Column n	1578

Filter: Teachers; Unweighted; base n = 1586

Table D2ii: Cut by school type

	SCHOOL TYPE			
Column %	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
Written exam questions based on a series of required practical activities	54%	62%	47%	39%
Demonstrating competency	54%	47%	71%	53%
Practical exam	42%	40%	49%	54%
Practical skills should not be assessed	6%	7%	4%	4%
Don't know/Not sure	1%	1%	0%	3%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

D2: How do you think practical skills should be assessed at age 16?

Table D2iii: Cut by nation

Column %	NATION				
	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Written exam questions based on a series of required practical activities	55%	56%	53%	43%	49%
Demonstrating competency	54%	60%	39%	43%	51%
Practical exam	40%	41%	65%	78%	58%
Practical skills should not be assessed	7%	4%	2%	2%	0%
Don't know/Not sure	1%	2%	0%	0%	4%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586

Table D2iv: Cut by FSM%

Column %	FSM% (UK only)	
	30% or above	Less than 30%
Written exam questions based on a series of required practical activities	47%	57%
Demonstrating competency	54%	54%
Practical exam	52%	39%
Practical skills should not be assessed	3%	7%
Don't know/Not sure	3%	1%
Column n	97	785

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = 1185

D3: Do you agree with tiering (foundation and higher) for science assessments at age 16?

Table D3i: Full data set

	%
Don't know /Not sure	9%
No	24%
Yes	67%
Column n	1358

Filter: Teachers AND EWNI; Unweighted; base n = 1358

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

D3: Do you agree with tiering (foundation and higher) for science assessments at age 16?

Table D3ii: Cut by school type

	SCHOOL TYPE			
Column %	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
Don't know /Not sure	7%	11%	21%	5%
No	24%	23%	24%	30%
Yes	68%	65%	56%	63%
Column n	994	236	68	60

Filter: Teachers AND EWNI; Unweighted;
base n = 1358

Table D3iii: Cut by nation

	NATION		
Column %	England	Wales	Northern Ireland
Don't know /Not sure	9%	5%	9%
No	25%	27%	7%
Yes	66%	68%	85%
Column n	1250	62	46 ¥

Filter: Teachers AND EWNI; Unweighted; base n = 1358

Table D3iv: Cut by FSM%

	FSM% (UK only)	
Column %	30% or above	Less than 30%
Don't know /Not sure	9%	8%
No	21%	24%
Yes	70%	68%
Column n	89	868

Filter: Teachers AND EWNI; Unweighted; base n = 1358

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Section E: Topical themes in education

In the 2024 survey, we asked teachers whether they had ever used artificial intelligence (AI within their teaching role.
Almost half (44%) reported using AI, with similar levels of use across nations, school types and percentages of FSM-eligible students.

There were no significant differences between heads of department and classroom teachers.
However, 61% of further education (FE) lecturers have used AI in their teaching role.
The data suggests that early career teachers (1–2 years) were more likely to have used AI in their teaching role.

Teachers can see AI's potential to ease their workload, but they need time to explore its capabilities and learn how to integrate these tools effectively into their work.
Teachers told us that they use AI for:
- emails
- reports
- letters home to parents
- quizzes
- multiple choice questions
- worksheets
- lesson plans.

The quantitative data suggests that, currently, AI is only slightly reducing workload: 3% of teachers said it had greatly reduced their workload.
In the open-ended responses, you commented on barriers to using it:
- the length of time it takes to learn how to use AI programs
- the time required to check and correct inaccurate content.

E1: Have you ever used AI within your teaching role?

Table E1i: Full data

	%
No	56%
Yes	44%
Column n	1586

Filter: Teachers; Unweighted; base n = 1586

Table E1ii: Cut by school type

	SCHOOL TYPE			
Column %	Mainstream state secondary schools	Private/independent school	Further education college	Other type of school
No	58%	50%	46%	56%
Yes	42%	50%	54%	43%
Column n	1185	261	70	70

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

E1: Have you ever used AI within your teaching role?

Table E1iii: Cut by nation

Column %	NATION				
	England	Scotland	Wales	Northern Ireland	Republic of Ireland
No	55%	63%	61%	67%	53%
Yes	45%	37%	39%	33%	47%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

Table E1iv: Cut by FSM%

Column %	FSM% (UK only)	
	30% or above	Less than 30%
No	53%	59%
Yes	47%	41%
Column n	97	785

Filter: Teachers AND MAINSTREAM SECONDARY SCHOOLS; Unweighted; base n = 1185

Table E1v: Cut by years of teaching

Column %	YEARS OF TEACHING			
	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS
No	48%	47%	54%	59%
Yes	52%	53%	46%	41%
Column n	105	136	278	1067

Filter: Teachers; Unweighted; base n = 1586

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

E2: To what extent do you think that using AI has reduced your workload?

Table E2i: Full data

	%
Greatly	3%
Slightly	39%
Somewhat	18%
Not at all	39%
Don't know/Not sure	2%
Column n	691

Filter: Teachers AND AI Yes; Unweighted; base n = 691

Table E2ii: Cut by FSM%

	FSM% (UK only)	
Column %	30% or above	Less than 30%
Greatly	2%	3%
Slightly	39%	39%
Somewhat	24%	18%
Not at all	33%	39%
Don't know/Not sure	2%	2%
Column n	46 ¥	424

Filter: Teachers AND AI Yes; Unweighted; base n = 691

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

The UK chemistry sector is a dynamic landscape that is predicted to grow over the next decade. But employers are struggling to find workers with the right skills.

As we've reported before, the curriculum needs to change so that chemistry education is aligned with the demands of employers and the UK economy. It's also important that science educators stay current with chemistry-related careers to adapt their lessons and equip students with the skills needed for today's job market.

In the 2024 Science Teaching Survey, we asked chemistry teachers of KS5, A-level, and Highers/Advanced Highers how aware they were of the skills that chemical sciences employers expect from prospective scientists:

- 15% of you reported being fully aware
- 20% reported being unaware.

To understand the reasons for this, we did some follow-up focus groups, where teachers reflected that knowledge of chemical science careers often comes from personal experiences, such as industry professionals transitioning into teaching.

E3: How aware are you of the skills that employers in the chemical sciences expect from prospective scientists?

Table E3i: Full data

	%
Fully aware	15%
Somewhat aware	63%
Unaware	20%
Don't know / Not sure	2%
Column n	1022

Filter: Teaches Chem KS5/H/AH/Leaving Cert AND
Teachers; base n = 1040

Table E3ii: Cut by school type

	SCHOOL TYPE			
Column %	**Mainstream state secondary schools**	**Private/independent school**	**Further education college**	**Other type of school**
Fully aware	14%	15%	14%	23%
Somewhat aware	63%	65%	68%	56%
Unaware	21%	17%	17%	15%
Don't know / Not sure	2%	3%	2%	5%
Column n	735	189	59	39 ¥

Filter: Teaches Chem
KS5/H/AH/Leaving Cert AND
Teachers; Unweighted; base n =
1040

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Table E3iii: Cut by nation

Column %	NATION				
	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Fully aware	16%	9%	4%	14%	16%
Somewhat aware	63%	71%	69%	67%	45%
Unaware	20%	15%	24%	14%	26%
Don't know / Not sure	2%	5%	2%	6%	13%
Column n	825	85	45 ¥	36 ¥	31 ¥

Filter: Teaches Chem
KS5/H/AH/Leaving Cert AND Teachers;
Unweighted; base n = 1040

Table E3iv: Cut by FSM%

Column %	FSM% (UK only)	
	30% or above	Less than 30%
Fully aware	14%	14%
Somewhat aware	67%	66%
Unaware	18%	19%
Don't know / Not sure	2%	1%
Column n	57	640

Filter: Teaches Chem KS5/H/AH/Leaving Cert AND Teachers; Unweighted; base n = 1040

Table E3v: Cut by years of teaching

Column %	YEARS OF TEACHING			
	1-2 YRS	3-4 YRS	5-9 YRS	10+ YRS
Fully aware	25%	19%	15%	13%
Somewhat aware	57%	62%	60%	64%
Unaware	15%	18%	23%	20%
Don't know / Not sure	3%	1%	2%	2%
Column n	60	73	154	735

Filter: Teaches Chem KS5/H/AH/Leaving Cert AND Teachers; Unweighted; base n = 1040

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

Section F: 2023-2024 comparison data

F1: For each of the key stages/levels that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these key stages/levels?

Table F1i: England, Wales and Northern Ireland

2023									
Column %	Biology at KS3	Biology at KS4	Biology at KS5	Chemistry at KS3	Chemistry at KS4	Chemistry at KS5	Physics at KS3	Physics at KS4	Physics at KS5
VERY + SOMEWHAT CONFIDENT	73%	56%	22%	82%	73%	40%	75%	61%	22%
VERY + SOMEWHAT UNCONFIDENT	3%	5%	8%	3%	4%	6%	3%	6%	9%
Column n	2156	2156	2156	2156	2156	2156	2156	2156	2156

Filter: ENG / WALES / NI ONLY (F) AND TEACHER (INCL. HOD) (F); base n = 2156; 26% filtered out

2024									
Column %	Biology at KS3	Biology at KS4	Biology at KS5	Chemistry at KS3	Chemistry at KS4	Chemistry at KS5	Physics at KS3	Physics at KS4	Physics at KS5
VERY + SOMEWHAT CONFIDENT	77%	61%	24%	85%	80%	49%	77%	60%	17%
VERY + SOMEWHAT UNCONFIDENT	4%	9%	18%	3%	6%	14%	5%	10%	24%
Column n	1358	1358	1358	1358	1358	1358	1358	1358	1358

Filter: Teachers AND EWNI; Unweighted; base n = 1358; 26% filtered out

Table F1ii: Scotland

2023											
Column %	Biology at N4	Biology at N5	Biology at Higher	Biology at Advanced Higher	Chemistry at N4	Chemistry at N5	Chemistry at Higher	Chemistry at Advanced Higher	Physics at N4	Physics at N5	Physics at Higher	Physics at Advanced Higher
VERY + SOMEWHAT CONFIDENT	17%	21%	18%	11%	39%	48%	41%	29%	32%	37%	32%	21%
VERY + SOMEWHAT UNCONFIDENT	1%	1%	1%	2%	5%	5%	5%	8%	2%	3%	5%	7%
Column n	242	242	242	242	242	242	242	242	242	242	242	242

Filter: SCOTLAND ONLY (F) AND TEACHER
(INCL. HOD) (F); base n = 242; 92% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

2024												
Column %	**Biology at N4**	**Biology at N5**	**Biology at Higher**	**Biology at Advanced Higher**	**Chemistry at N4**	**Chemistry at N5**	**Chemistry at Higher**	**Chemistry at Advanced Higher**	**Physics at N4**	**Physics at N5**	**Physics at Higher**	**Physics at Advanced Higher**
VERY + SOMEWHAT CONFIDENT	26%	28%	20%	16%	49%	52%	45%	28%	37%	37%	34%	22%
VERY + SOMEWHAT UNCONFIDENT	3%	2%	6%	8%	5%	4%	8%	14%	4%	4%	5%	12%
Column n	183	183	183	183	183	183	183	183	183	183	183	183

Filter: Teachers AND Scotland; Unweighted; base
n = 183; 90% filtered out

Table F1iii: Ireland

2023											
Column %	**Junior Cycle Biological World**	**Junior Cycle Chemical World**	**Junior Cycle Physical World**	**Junior Cycle Earth and Space**	**Transition Year Science**	**Leaving Cert Biology**	**Leaving Cert Ag Science**	**Leaving Cert Chemistry**	**Leaving Cert Physics**	**Leaving Cert Chem and Physics**	**Leaving Cert Computer Science**
VERY + SOMEWHAT CONFIDENT	88%	91%	90%	59%	55%	50%	7%	38%	29%	5%	2%
VERY + SOMEWHAT UNCONFIDENT	10%	7%	5%	22%	10%	5%	2%	2%	0%	0%	2%
Column n	58	58	58	58	58	58	58	58	58	58	58

Filter: IRELAND ONLY (F) AND TEACHER (INCL.
HOD) (F); base n = 58; 98% filtered out

2024											
Column %	**Junior Cycle Biological World**	**Junior Cycle Chemical World**	**Junior Cycle Physical World**	**Junior Cycle Earth and Space**	**Transition Year Science**	**Leaving Cert Biology**	**Leaving Cert Ag Science**	**Leaving Cert Chemistry**	**Leaving Cert Physics**	**Leaving Cert Chem and Physics**	**Leaving Cert Computer Science**
Very confident + Somewhat confident	84%	87%	78%	69%	67%	47%	11%	47%	24%	7%	7%
Somewhat unconfident + Very unconfident	9%	9%	9%	20%	11%	13%	11%	16%	4%	4%	0%
Column n	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥	45 ¥

Filter: Teachers AND Republic of Ireland; Unweighted; base n
= 45; 98% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and
therefore should not be used to form reliable conclusions.

F2: Mental wellbeing

Table F2i: Teachers

2023	
Column %	%
High wellbeing (28 or greater)	12%
Moderate wellbeing (20 - 27)	62%
Low wellbeing (Less than 20)	25%
Column n	2392

Total sample; Unweighted; base n = 2392

2024	
Column %	%
High wellbeing (28 or greater)	12%
Moderate wellbeing (20 - 27)	64%
Low wellbeing (Less than 20)	24%
Column n	1846

Total sample; Unweighted; base n = 1846

Table F2ii: Technicians

2023		2024	
	%		%
High wellbeing (28 or greater)	19%	High wellbeing (28 or greater)	17%
Moderate wellbeing (20 - 27)	68%	Moderate wellbeing (20 - 27)	65%
Low wellbeing (Less than 20)	13%	Low wellbeing (Less than 20)	19%
Column n	447	Column n	260

Filter: Technicians; base n = 447; 85% filtered out

Filter: Technicians; Unweighted; base n = 260; 86% filtered out

F3: Please describe the staffing at your school in each of the following areas

Table F3i: Full data

2023				
Column %	Biology teachers	Chemistry teachers	Physics teachers	Science technicians
Overstaffed	18%	4%	2%	1%
Adequately staffed	67%	64%	50%	60%
Understaffed	13%	30%	46%	38%
Don't know / Not sure	2%	2%	2%	1%
Column n	2932	2932	2932	2932

Total sample; base n = 2932

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

2024				
Column %	Biology teachers	Chemistry teachers	Physics teachers	Science technicians
Overstaffed	16%	3%	2%	1%
Adequately staffed	66%	62%	48%	57%
Understaffed	16%	33%	47%	39%
Don't know / Not sure	2%	1%	2%	1%
Column n	1846	1846	1846	1846

Total sample; base n = 1846

Table F3ii: Biology teachers cut by nation

2023					
	Biology teachers				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	19%	12%	19%	17%	17%
Adequately staffed	66%	72%	69%	73%	69%
Understaffed	13%	12%	10%	10%	12%
Column n	2401	284	117	71	59

Total sample; base n = 2932

2024					
	Biology teachers				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	17%	10%	13%	17%	13%
Adequately staffed	64%	70%	76%	66%	67%
Understaffed	16%	14%	11%	17%	20%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

Table F3iii: Chemistry teachers cut by nation

2023					
	Chemistry teachers				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Overstaffed	4%	4%	6%	1%	3%
Adequately staffed	62%	77%	66%	62%	83%
Understaffed	32%	17%	26%	37%	12%
Column n	2401	284	117	71	59

Total sample; base n = 2932

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

2024					
	Chemistry teachers				
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Overstaffed	3%	5%	6%	2%	2%
Adequately staffed	61%	70%	62%	47%	62%
Understaffed	34%	21%	31%	51%	31%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

Table F3iv: Physics teachers cut by nation

2023					
	Physics teachers				
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Overstaffed	2%	5%	3%	0%	7%
Adequately staffed	47%	68%	52%	55%	73%
Understaffed	49%	24%	44%	41%	15%
Column n	2401	284	117	71	59

Total sample; base n = 2932

2024					
	Physics teachers				
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Overstaffed	2%	3%	0%	0%	2%
Adequately staffed	45%	65%	51%	47%	58%
Understaffed	51%	27%	49%	53%	36%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

Table F3v: Science technicians cut by nation

2023					
	Science technicians				
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Overstaffed	1%	1%	0%	0%	0%
Adequately staffed	63%	54%	50%	44%	12%
Understaffed	35%	43%	49%	54%	76%
Column n	2401	284	117	71	59

Total sample; base n = 2932

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

2024				
	Science technicians			
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Overstaffed	1%	1%	0%	0%	0%
Adequately staffed	59%	49%	45%	55%	13%
Understaffed	37%	47%	54%	43%	40%
Column n	1431	252	71	47 ¥	45 ¥

Total sample; Unweighted; base n = 1846

F4: On a scale of 0 to 10, where '0' is not satisfied at all and '10' is completely satisfied, how satisfied are you with your job as a teacher/technician?

Table F4i: Teachers

2023	
	%
10 - Completely satisfied	4%
9	7%
8	23%
7	23%
6	14%
5	8%
4	6%
3	7%
2	4%
1	1%
0 - Not satisfied at all	2%
Column n	1991

2024	
	%
10- Completely satisfied	4%
9	7%
8	22%
7	21%
6	16%
5	6%
4	8%
3	8%
2	5%
1	1%
0- Not satisfied at all	1%
Column n	1586

Filter: TEACHER (INCL. HOD) (F) AND ENGLAND ONLY (F); base n = 1992; 32% filtered out

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F4: On a scale of 0 to 10, where '0' is not satisfied at all and '10' is completely satisfied, how satisfied are you with your job as a teacher/technician?

Table F4ii: Technicians

2023		2024	
	%		**%**
10 - Completely satisfied	6%	10- Completely satisfied	8%
9	14%	9	10%
8	26%	8	30%
7	22%	7	20%
6	9%	6	10%
5	10%	5	8%
4	2%	4	5%
3	4%	3	5%
2	2%	2	2%
1	1%	1	0%
0 - Not satisfied at all	2%	0- Not satisfied at all	1%
Column n	476	Column n	260

Filter: TECHNICIAN (F); base n = 476; 84% filtered out

Filter: Technicians; Unweighted; base n = 260; 86% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F5: Was the amount of time that you undertook subject specific professional development for each subject...?

Table F5i: Full data

2023

Column %	Biology	Chemistry	Physics	General Science	Non-science subjects
Sufficient + Somewhat sufficient	17%	21%	21%	21%	29%
Somewhat insufficient + Insufficient	34%	30%	30%	30%	21%
Column n	878	1210	1044	981	688

Filter: TEACHER (INCL. HOD) (F) AND TEACHERS WITH MORE THAN 1 YEAR EXPERIENCE; base n = from 688 to 1210; total n = 1904; 1216 missing; 35% filtered out

2024

Column %	Biology	Chemistry	Physics	General Science	Non-science subjects
Sufficient + Somewhat sufficient	13%	18%	16%	15%	23%
Somewhat insufficient + Insufficient	38%	32%	35%	35%	28%
Column n	795	1087	856	841	496

Filter: Teachers AND TEACHERS WITH MORE THAN 1 YEAR EXPERIENCE; Unweighted; base n = from 496 to 1087; total n = 1546; 1050 missing; 16% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F5: Was the amount of time that you undertook subject specific professional development for each subject...?

Table F5ii: Biology cut by nation

2023

	Biology				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	12%	7%	7%	6%	12%
Somewhat sufficient	5%	8%	5%	0%	10%
Neither sufficient nor insufficient	13%	5%	8%	12%	2%
Somewhat insufficient	9%	3%	3%	5%	0%
Insufficient	25%	6%	26%	32%	22%
Don't know / Can't remember	2%	1%	5%	0%	0%
Not applicable – don't teach this subject	34%	71%	45%	45%	53%
Sufficient + Somewhat sufficient	17%	15%	12%	6%	22%
Somewhat insufficient + Insufficient	34%	9%	29%	37%	22%
Column n	1992	242	99	65	58

Filter: TEACHER (INCL. HOD) (F); base n = 2456;
16% filtered out

2024

	Biology				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	7%	4%	5%	4%	2%
Somewhat sufficient	6%	8%	11%	2%	11%
Neither sufficient nor insufficient	12%	5%	6%	22%	7%
Somewhat insufficient	10%	3%	6%	11%	7%
Insufficient	33%	10%	40%	35%	16%
Don't know / Can't remember	4%	2%	0%	0%	4%
Not applicable – don't teach this subject	29%	67%	31%	26%	53%
Sufficient + Somewhat sufficient	13%	13%	16%	7%	13%
Somewhat insufficient + Insufficient	42%	13%	47%	46%	22%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F5: Was the amount of time that you undertook subject specific professional development for each subject...?

Table F5iii: Chemistry cut by nation

2023					
		Chemistry			
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Sufficient	16%	19%	10%	11%	12%
Somewhat sufficient	9%	14%	8%	8%	9%
Neither sufficient nor insufficient	16%	8%	10%	12%	2%
Somewhat insufficient	12%	5%	11%	11%	2%
Insufficient	28%	11%	37%	43%	17%
Don't know / Can't remember	2%	0%	5%	2%	2%
Not applicable – don't teach this subject	16%	43%	18%	14%	57%
Sufficient + Somewhat sufficient	26%	33%	18%	18%	21%
Somewhat insufficient + Insufficient	40%	16%	48%	54%	19%
Column n	1992	242	99	65	58

Filter: TEACHER (INCL. HOD) (F); base n = 2456; 16% filtered out

2024					
		Chemistry			
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Sufficient	15%	10%	15%	13%	11%
Somewhat sufficient	11%	18%	3%	13%	13%
Neither sufficient nor insufficient	14%	7%	8%	11%	9%
Somewhat insufficient	12%	5%	6%	15%	7%
Insufficient	36%	16%	55%	39%	20%
Don't know / Can't remember	3%	2%	0%	0%	4%
Not applicable – don't teach this subject	10%	42%	13%	9%	36%
Sufficient + Somewhat sufficient	26%	28%	18%	26%	24%
Somewhat insufficient + Insufficient	48%	21%	61%	54%	27%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F5: Was the amount of time that you undertook subject specific professional development for each subject...?

Table F5iv: Physics cut by nation

2023					
	Physics				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	15%	13%	9%	9%	2%
Somewhat sufficient	8%	14%	10%	0%	3%
Neither sufficient nor insufficient	13%	7%	10%	14%	3%
Somewhat insufficient	11%	3%	6%	0%	2%
Insufficient	25%	7%	28%	32%	17%
Don't know / Can't remember	2%	0%	4%	2%	0%
Not applicable – don't teach this subject	26%	56%	32%	43%	72%
Sufficient + Somewhat sufficient	23%	27%	19%	9%	5%
Somewhat insufficient + Insufficient	36%	10%	34%	32%	19%
Column n	1992	242	99	65	58

Filter: TEACHER (INCL. HOD) (F); base n = 2456; 16% filtered out

2024					
	Physics				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	10%	10%	3%	2%	7%
Somewhat sufficient	8%	10%	6%	4%	2%
Neither sufficient nor insufficient	11%	5%	8%	9%	7%
Somewhat insufficient	9%	4%	8%	9%	0%
Insufficient	32%	9%	34%	39%	16%
Don't know / Can't remember	3%	2%	0%	2%	2%
Not applicable – don't teach this subject	26%	60%	40%	35%	67%
Sufficient + Somewhat sufficient	18%	20%	10%	7%	9%
Somewhat insufficient + Insufficient	41%	14%	42%	48%	16%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F5: Was the amount of time that you undertook subject specific professional development for each subject...?

Table F5v: General science cut by nation

2023					
	General Science				
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Sufficient	12%	17%	3%	14%	21%
Somewhat sufficient	7%	16%	5%	8%	28%
Neither sufficient nor insufficient	15%	17%	10%	12%	17%
Somewhat insufficient	8%	9%	5%	6%	14%
Insufficient	23%	14%	38%	32%	19%
Don't know / Can't remember	3%	1%	4%	2%	0%
Not applicable – don't teach this subject	32%	26%	34%	26%	2%
Sufficient + Somewhat sufficient	19%	33%	8%	22%	48%
Somewhat insufficient + Insufficient	31%	23%	43%	38%	33%
Column n	1992	242	99	65	58

Filter: TEACHER (INCL. HOD) (F); base n = 2456; 16% filtered out

2024					
	General Science				
Column %	**England**	**Scotland**	**Wales**	**Northern Ireland**	**Republic of Ireland**
Sufficient	8%	10%	3%	4%	11%
Somewhat sufficient	8%	11%	8%	4%	22%
Neither sufficient nor insufficient	13%	16%	11%	17%	11%
Somewhat insufficient	9%	14%	8%	9%	13%
Insufficient	27%	27%	42%	43%	31%
Don't know / Can't remember	4%	2%	0%	4%	0%
Not applicable – don't teach this subject	31%	20%	27%	17%	11%
Sufficient + Somewhat sufficient	16%	22%	11%	9%	33%
Somewhat insufficient + Insufficient	36%	41%	50%	52%	44%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.

F5: Was the amount of time that you undertook subject specific professional development for each subject...?

Table F5vi: Non-science subjects cut by nation

2023	Non-science subjects				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	15%	13%	9%	6%	21%
Somewhat sufficient	6%	12%	7%	5%	12%
Neither sufficient nor insufficient	9%	6%	7%	15%	10%
Somewhat insufficient	4%	5%	1%	2%	3%
Insufficient	11%	5%	19%	12%	17%
Don't know / Can't remember	3%	1%	3%	0%	0%
Not applicable – don't teach this subject	52%	58%	54%	60%	36%
Sufficient + Somewhat sufficient	21%	26%	16%	11%	33%
Somewhat insufficient + Insufficient	15%	9%	20%	14%	21%
Column n	1992	242	99	65	58

Filter: TEACHER (INCL. HOD) (F); base n = 2456; 16% filtered out

2024	Non-science subjects				
Column %	England	Scotland	Wales	Northern Ireland	Republic of Ireland
Sufficient	9%	8%	6%	2%	20%
Somewhat sufficient	6%	4%	3%	7%	9%
Neither sufficient nor insufficient	7%	4%	3%	4%	7%
Somewhat insufficient	4%	3%	0%	9%	4%
Insufficient	14%	11%	21%	24%	16%
Don't know / Can't remember	4%	2%	0%	4%	0%
Not applicable – don't teach this subject	57%	68%	66%	50%	44%
Sufficient + Somewhat sufficient	15%	12%	10%	9%	29%
Somewhat insufficient + Insufficient	17%	15%	21%	33%	20%
Column n	1250	183	62	46 ¥	45 ¥

Filter: Teachers; Unweighted; base n = 1586; 14% filtered out

¥: Sample size is less than 50, which we advise is not a statistically significant base number and therefore should not be used to form reliable conclusions.