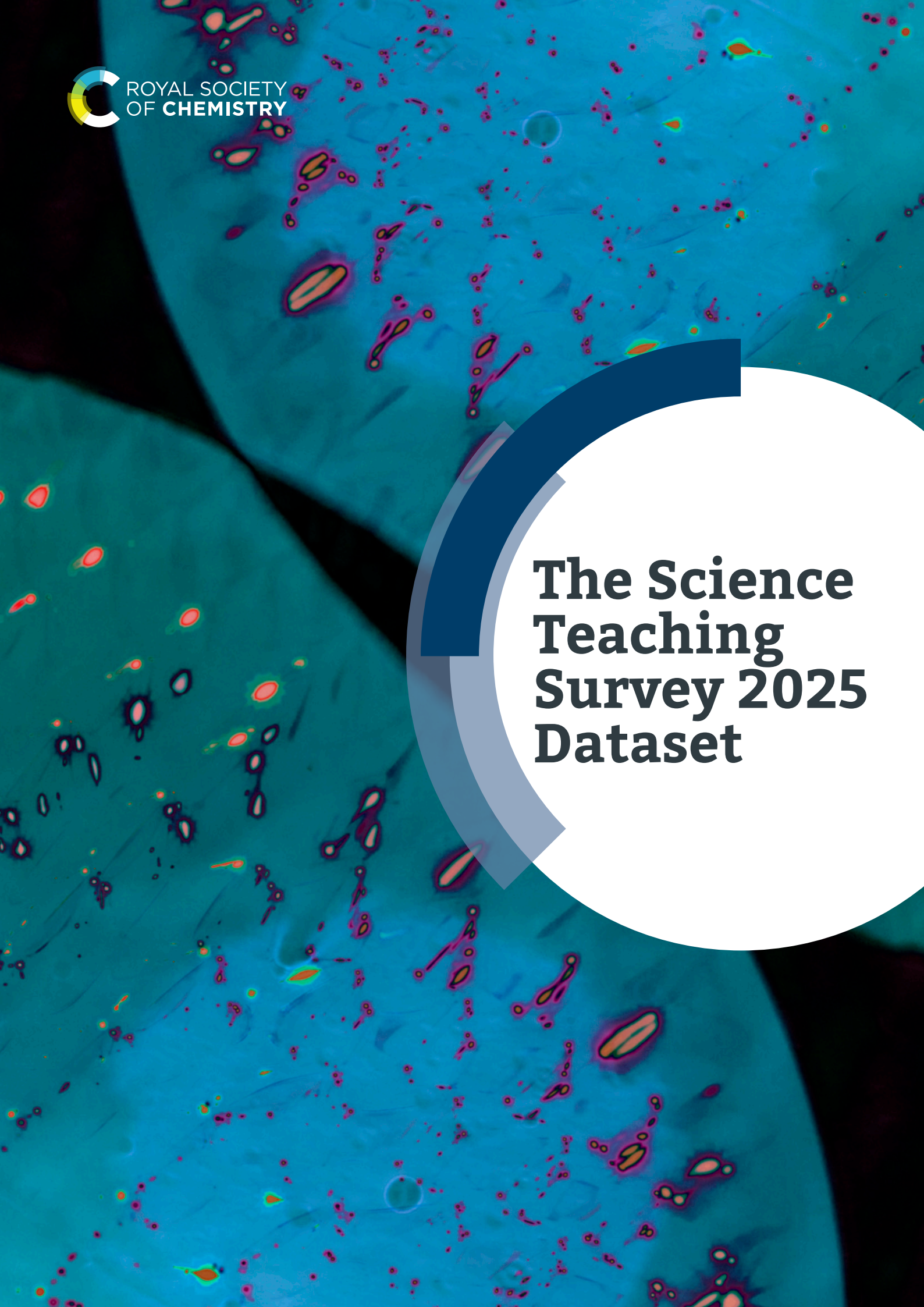


ROYAL SOCIETY OF CHEMISTRY

# The Science Teaching Survey 2025 Dataset

# Contents

# Contents

## Introduction

# The Science Teaching Survey 2025

### Our findings reveal that greater support is needed for our science educators

With 1,931 responses, The Science Teaching Survey 2025 reveals that notable challenges in science education remain. A key theme from the data is how technicians and support staff are crucial in aiding teachers and their students. The results also highlight the strong need for an empowered, sufficiently staffed and expert workforce to give young people access to a world-class science education.

For the past four years, science teachers and technicians have been sharing their experiences in The Science Teaching Survey, which is led by the Royal Society of Chemistry. This year's survey was supported by CLEAPPS and our partners in the Science Education Policy Alliance (SEPA), which includes the Association for Science Education (ASE), the Institute of Physics (IOP), the Royal Society (RS), the Royal Society of Biology (RSB) and the Royal Society of Chemistry (RSC).

**Take me to the:**

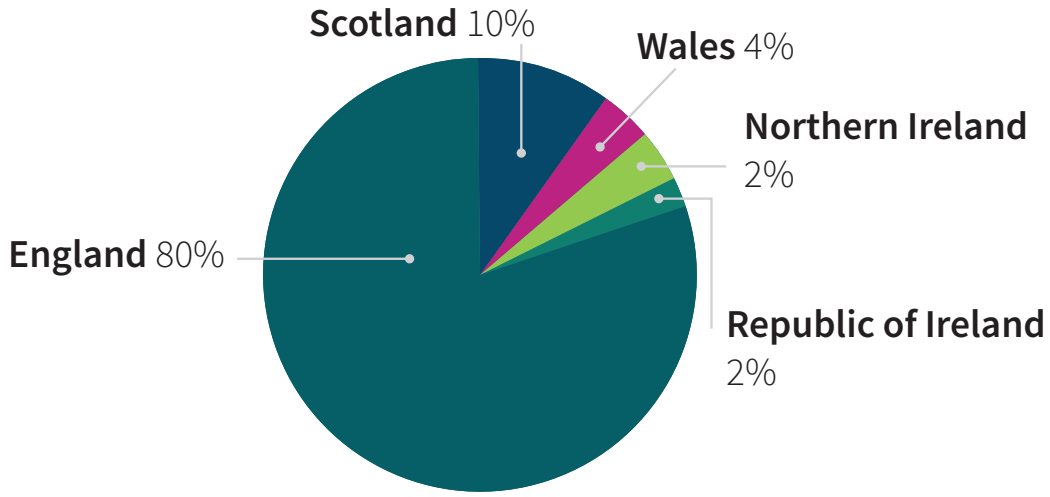
2022 survey findings

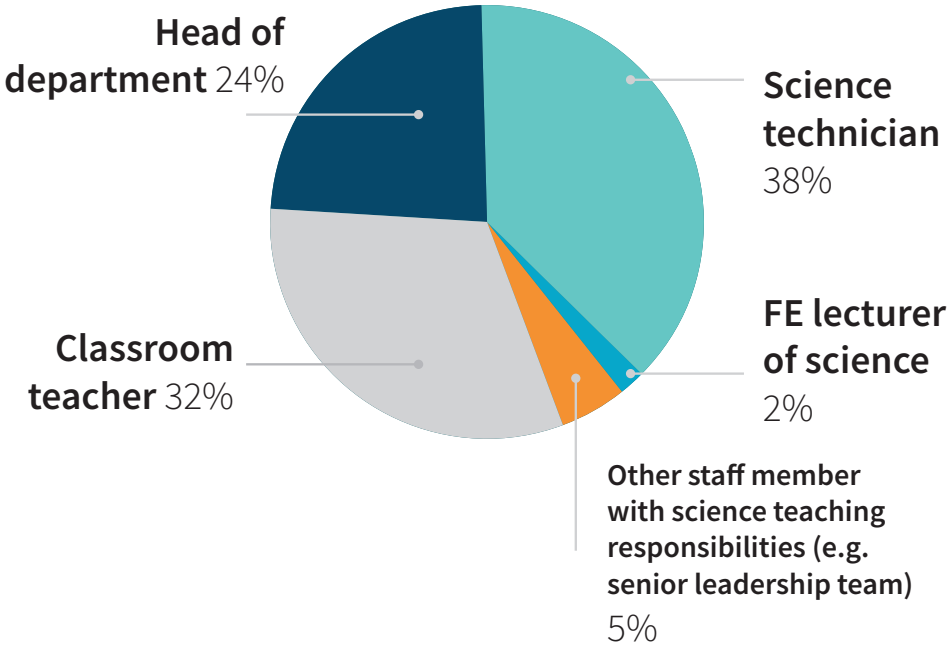
2023 survey findings

2024 survey findings

# About the 2025 survey

**Science teachers and technicians in secondary and further education (FE) completed the survey in April 2025. Here is a breakdown of survey participants by nation and job role:**




*The data in the headlines pages is from all schools surveyed, however our data in sections A to H for each nation are from state funded secondary schools only.

# Educators call for investment in science education

Insufficient funding is particularly affecting some nations, with the majority of respondents in Scotland (66%) and Wales (79%) indicating that this is a key challenge.

The proportion of teachers and technicians from state funded secondary schools reporting this issue is has increased between 2023 and 2025.

The cost of consumables, chemicals and equipment is a barrier to running practical work, which negatively affects student learning outcomes.

## What challenges does your school face?

| | 2023 | 2025 |
|---|---|---|
| Insufficient funding | 49% | 57% |
| High staff turnover | 26% | 23% |
| Insufficient staff non-contact time (encroachment and reallocation) | 40% | 44% |
| Lack of support to students from parent/family/guardian | 35% | 34% |
| Poor pupil attendance | 34% | 32% |
| Understaffing of teaching staff | 32% | 30% |
| Understaffing of classroom support staff | 40% | 42% |
| High staff absence | 21% | 25% |
| Insufficient support from leadership | 26% | 33% |
| Negative working environment | 18% | 20% |
| Lack of collaboration/teamwork amongst staff | 15% | 20% |
| Not enough support for inexperienced teachers | 15% | 21% |
| There are no challenges | 7% | 5% |
| Other responses | 7% | 12% |
| Column n | 2456 | 1931 |

Total sample; Unweighted

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Insufficient funding | 853 (55%) | 125 (66%) | 63 (79%) | 45 (59%) | 19 (42%) |
| High staff turnover | 367 (24%) | 46 (24%) | 17 (21%) | 13 (17%) | 9 (20%) |
| Insufficient staff non-contact time | 656 (43%) | 94 (49%) | 32 (40%) | 45 (59%) | 23 (51%) |
| Lack of support to students from parent/family/guardian | 511 (33%) | 71 (37%) | 43 (54%) | 26 (34%) | 13 (29%) |
| Poor pupil attendance | 434 (28%) | 104 (55%) | 42 (53%) | 25 (33%) | 17 (38%) |
| Understaffing of teaching staff | 455 (30%) | 59 (31%) | 24 (30%) | 29 (38%) | 8 (18%) |
| Understaffing of classroom support staff | 628 (41%) | 120 (63%) | 42 (53%) | 16 (21%) | 12 (27%) |
| High staff absence | 364 (24%) | 72 (38%) | 28 (35%) | 14 (18%) | 3 (7%) |
| Insufficient support from leadership | 454 (29%) | 97 (51%) | 42 (53%) | 25 (33%) | 17 (38%) |
| Negative working environment | 271 (18%) | 56 (29%) | 29 (36%) | 21 (28%) | 10 (22%) |
| Lack of collaboration/teamwork amongst staff | 300 (19%) | 47 (25%) | 20 (25%) | 16 (21%) | 11 (24%) |
| Not enough support for inexperienced teachers | 325 (21%) | 32 (17%) | 22 (28%) | 19 (25%) | 12 (27%) |
| Other | 179 (12%) | 27 (14%) | 13 (16%) | 6 (8%) | 7 (16%) |
| There are no challenges | 88 (6%) | 1 (1%) | 2 (3%) | 3 (4%) | 1 (2%) |
| Column n | 1540 | 190 | 80 | 76 | 45 |

Total sample; Unweighted

## What challenges does your school face? (continued)

| | 2023 | 2025 |
|---|---|---|
| Insufficient funding | 1072 (57%) | 968 (63%) |
| High staff turnover | 508 (27%) | 365 (24%) |
| Insufficient staff non-contact time | 771 (41%) | 702 (45%) |
| Lack of support to students from parent/family/guardian | 771 (41%) | 605 (39%) |
| Poor pupil attendance | 714 (38%) | 563 (36%) |
| Understaffing of teaching staff | 677 (36%) | 502 (32%) |
| Understaffing of classroom support staff | 884 (47%) | 738 (48%) |
| High staff absence | 470 (25%) | 434 (28%) |
| Insufficient support from leadership | 489 (26%) | 513 (33%) |
| Negative working environment | 357 (19%) | 302 (20%) |
| Lack of collaboration/teamwork amongst staff | 282 (15%) | 312 (20%) |
| Not enough support for inexperienced teachers | 282 (15%) | 350 (23%) |
| Other | 113 (6%) | 163 (11%) |
| There are no challenges | 75 (4%) | 44 (3%) |
| Column n | 1880 | 1546 |

Filter: State funded secondary schools; Unweighted

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Insufficient funding | 748 (62%) | 118 (68%) | 57 (79%) | 33 (52%) | 12 (39%) |
| High staff turnover | 292 (24%) | 43 (25%) | 16 (22%) | 8 (13%) | 6 (19%) |
| Insufficient staff non-contact time | 537 (44%) | 85 (49%) | 28 (39%) | 37 (59%) | 15 (48%) |
| Lack of support to students from parent/family/guardian | 466 (39%) | 69 (40%) | 41 (57%) | 18 (29%) | 11 (35%) |
| Poor pupil attendance | 391 (32%) | 98 (57%) | 41 (57%) | 19 (30%) | 14 (45%) |
| Understaffing of teaching staff | 395 (33%) | 57 (33%) | 22 (31%) | 23 (37%) | 5 (16%) |
| Understaffing of classroom support staff | 561 (46%) | 118 (68%) | 38 (53%) | 12 (19%) | 9 (29%) |
| High staff absence | 329 (27%) | 67 (39%) | 26 (36%) | 10 (16%) | 2 (6%) |
| Insufficient support from leadership | 359 (30%) | 87 (50%) | 37 (51%) | 19 (30%) | 11 (35%) |
| Negative working environment | 199 (16%) | 51 (29%) | 27 (38%) | 17 (27%) | 8 (26%) |
| Lack of collaboration/teamwork amongst staff | 228 (19%) | 42 (24%) | 18 (25%) | 13 (21%) | 11 (35%) |
| Not enough support for inexperienced teachers | 274 (23%) | 31 (18%) | 21 (29%) | 15 (24%) | 9 (29%) |
| Other | 121 (10%) | 24 (14%) | 13 (18%) | 3 (5%) | 2 (6%) |
| There are no challenges | 38 (3%) | 0 (0%) | 2 (3%) | 3 (5%) | 1 (3%) |
| Column n | 1207 | 173 | 72 | 63 | 31 |

Filter: State funded secondary schools; Unweighted

## What challenges does your school face? (continued)

| | 2023 | 2025 |
|---|---|---|
| Understaffing of science technicians | 508 (27%) | 448 (29%) |
| Insufficient time for practical to be taught alongside theory | 1128 (60%) | 895 (58%) |
| Lack of equipment | 658 (35%) | 604 (39%) |
| No time for training/practicing | 583 (31%) | 505 (33%) |
| Health and safety concerns | 282 (15%) | 299 (19%) |
| Challenging student behaviour | 959 (51%) | 744 (48%) |
| Cost of consumables and chemicals | 696 (37%) | 668 (43%) |
| Lack of confidence in delivering practical sessions | 132 (7%) | 175 (11%) |
| Insufficient lab access | 338 (18%) | 278 (18%) |
| Unsuitable labs | 376 (20%) | 403 (26%) |
| No barriers | 150 (8%) | 111 (7%) |
| Other | 132 (7%) | 71 (5%) |
| Column n | 1880 | 1546 |

Filter: State funded secondary schools; Unweighted

## What are the barriers you face to running practical work in your school?

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Understaffing of science technicians | 325 (27%) | 55 (32%) | 30 (42%) | 19 (30%) | 19 (61%) |
| Insufficient time for practical to be taught alongside theory | 689 (57%) | 105 (61%) | 43 (60%) | 36 (57%) | 22 (71%) |
| Lack of equipment | 445 (37%) | 92 (53%) | 32 (44%) | 18 (29%) | 17 (55%) |
| No time for training/practicing | 397 (33%) | 55 (32%) | 25 (35%) | 16 (25%) | 12 (39%) |
| Health and safety concerns | 225 (19%) | 31 (18%) | 18 (25%) | 16 (25%) | 9 (29%) |
| Challenging student behaviour | 584 (48%) | 87 (50%) | 42 (58%) | 21 (33%) | 10 (32%) |
| Cost of consumables and chemicals | 487 (40%) | 106 (61%) | 46 (64%) | 21 (33%) | 8 (26%) |
| Lack of confidence in delivering practical sessions | 150 (12%) | 11 (6%) | 4 (6%) | 5 (8%) | 5 (16%) |
| Insufficient lab access | 236 (20%) | 10 (6%) | 12 (17%) | 8 (13%) | 12 (39%) |
| Unsuitable labs | 343 (28%) | 24 (14%) | 15 (21%) | 12 (19%) | 9 (29%) |
| Other | 82 (7%) | 19 (11%) | 5 (7%) | 4 (6%) | 1 (3%) |
| No barriers | 64 (5%) | 2 (1%) | 1 (1%) | 3 (5%) | 1 (3%) |
| Column n | 1207 | 173 | 72 | 63 | 31 |
| There are no challenges | 38 (3%) | 0 (0%) | 2 (3%) | 3 (5%) | 1 (3%) |
| Column n | 1207 | 173 | 72 | 63 | 31 |

Filter: State funded secondary schools; Unweighted

## Which of the following barriers apply to your own experience of accessing subject specific professional development?

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Lack of funding for cover teachers | 379 (53%) | 77 (58%) | 29 (76%) | 29 (62%) | 10 (32%) |
| Lack of available cover teachers | 310 (43%) | 72 (54%) | 20 (53%) | 29 (62%) | 12 (39%) |
| Course cost & expenses to attend courses | 462 (65%) | 96 (72%) | 27 (71%) | 27 (57%) | 5 (16%) |
| School policy restricts the type of courses I can attend | 153 (21%) | 24 (18%) | 12 (32%) | 5 (11%) | 4 (13%) |
| Having to attend PD courses/training in my own time | 377 (53%) | 82 (62%) | 22 (58%) | 26 (55%) | 22 (71%) |
| Availability of courses | 237 (33%) | 55 (41%) | 15 (39%) | 28 (60%) | 18 (58%) |
| Lack of knowledge about opportunities | 236 (33%) | 46 (35%) | 11 (29%) | 23 (49%) | 7 (23%) |
| Not having access to the required technology/software/learning platforms, etc. | 34 (5%) | 7 (5%) | 3 (8%) | 4 (9%) | 4 (13%) |
| Prohibitive travel time / distance | 238 (33%) | 68 (51%) | 16 (42%) | 19 (40%) | 5 (16%) |
| Other | 61 (9%) | 11 (8%) | 2 (5%) | 5 (11%) | 3 (10%) |
| There are no barriers | 42 (6%) | 2 (2%) | 0 (0%) | 0 (0%) | 1 (3%) |
| Column n | 714 | 133 | 38 | 47 | 31 |

Filter: State funded secondary schools + Teachers only; Unweighted

| | 2023 | 2025 |
|---|---|---|
| Lack of funding for cover teachers | 921 (49%) | 524 (54%) |
| Lack of available cover teachers | 846 (45%) | 443 (46%) |
| Course cost & expenses to attend courses | 1166 (62%) | 617 (64%) |
| School policy restricts the type of courses I can attend | 338 (18%) | 198 (21%) |
| Having to attend PD courses/training in my own time | 921 (49%) | 529 (55%) |
| Availability of courses | 639 (34%) | 353 (37%) |
| Lack of knowledge about opportunities | 658 (35%) | 323 (34%) |
| Not having access to the required technology/software/ learning platforms, etc. | 113 (6%) | 52 (5%) |
| Prohibitive travel time / distance | 620 (33%) | 346 (36%) |
| There are no barriers | 113 (6%) | 82 (9%) |
| Other | 169 (9%) | 45 (5%) |
| Column n | 1880 | 963 |

Filter: State funded secondary schools + Teachers only; Unweighted

## Science Teaching Survey 2025 Headlines

# A shortage of teaching assistants is having a negative impact on student learning

61% of all UK and Ireland respondents told us that there was a shortage of teaching assistants at their school (65% in state funded secondary schools).

42% of teachers, from all nations and school types, indicated that insufficient classroom support poses challenges to their science teaching. In Scotland, this rose to 65%.

70% of respondents in the UK and Ireland said that more teaching assistants would improve the equitable experience of students with SEND (Special Education Needs and Disabilities)/ ALN (Additional Learning Needs) in science lessons.

## Please describe the staffing at your school or college for teaching assistants. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | Teaching assistants |
|---|---|
| Overstaffed | 12 (1%) |
| Adequately staffed | 300 (18%) |
| Understaffed | 1003 (61%) |
| Don't know / Not sure | 316 (19%) |
| Column n | 1631 |

Filter: Not select 'Not applicable'; Unweighted; base n = 1631-1898

## Please describe the staffing at your school or college for teaching assistants. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Overstaffed | 7 (1%) | 0 (0%) | 1 (1%) | 4 (7%) | 0 (0%) |
| Adequately staffed | 259 (20%) | 9 (5%) | 8 (11%) | 23 (38%) | 1 (5%) |
| Understaffed | 769 (59%) | 141 (85%) | 55 (75%) | 21 (35%) | 17 (85%) |
| Don't know / Not sure | 278 (21%) | 15 (9%) | 9 (12%) | 12 (20%) | 2 (10%) |
| Column n | 1313 | 165 | 73 | 60 | 20* |

Filter: Not select 'Not applicable'; Unweighted. *Small sample size.

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Overstaffed | 7 (1%) | 0 (0%) | 1 (1%) | 4 (7%) | 0 (0%) |
| Adequately staffed | 259 (20%) | 9 (5%) | 8 (11%) | 23 (38%) | 1 (5%) |
| Understaffed | 769 (59%) | 141 (85%) | 55 (75%) | 21 (35%) | 17 (85%) |
| Don't know / Not sure | 278 (21%) | 15 (9%) | 9 (12%) | 12 (20%) | 2 (10%) |
| Column n | 1313 | 165 | 73 | 60 | 20* |

Filter: Not select 'Not applicable' + State funded secondary schools; Unweighted. *Small sample size.

## Which of the following present challenges to your classroom teaching in science?

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Insufficient classroom support, e.g. no teaching assistants | 381 (42%) | 96 (65%) | 20 (49%) | 6 (11%) | 21 (47%) |
| Column n | 916 | 147 | 41 | 57 | 45 |

Filter: Teachers only; Unweighted

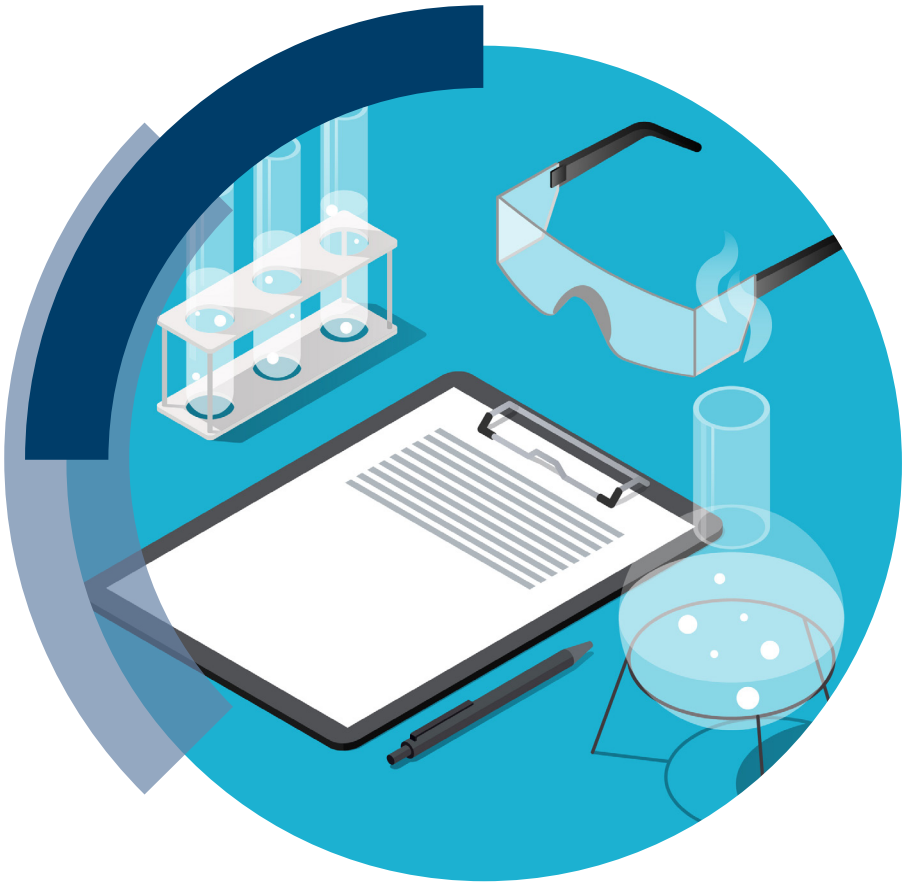
## For your school/department, what would improve the equitable experience of students with SEND/ALN in science lessons?

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| More teaching assistant support | 1048 (69%) | 157 (85%) | 61 (78%) | 31 (41%) | 38 (84%) |
| Specialist practical equipment (materials, ear defenders, quiet classroom areas etc) | 518 (34%) | 68 (37%) | 34 (44%) | 25 (33%) | 16 (36%) |
| More training on specific strategies for SEND/ALN students | 685 (45%) | 91 (49%) | 34 (44%) | 37 (49%) | 27 (60%) |
| Teaching resources that are accessible for SEND/ALN learners | 704 (46%) | 104 (56%) | 39 (50%) | 34 (45%) | 25 (56%) |
| Specialist technology | 316 (21%) | 48 (26%) | 16 (21%) | 15 (20%) | 14 (31%) |
| Other | 119 (8%) | 13 (7%) | 10 (13%) | 10 (13%) | 1 (2%) |
| Column n | 1518 | 185 | 78 | 75 | 45 |

Filter: Teachers only; Unweighted

# A confident and vital technician workforce is at risk





A high percentage of technicians at all key stages feel confident in delivering support in the classroom.

Access to role-specific professional development is a challenge, with 30% of technicians in the UK indicating that they did not receive any CPD in the last academic year.

Since the 2023 survey, there has been a 159% increase in technicians citing high levels of stress and exhaustion as reasons for leaving their roles.

There is a shortage of science technicians, which is making it a challenge to run practical work.

## For each of the key stages, how confident are you in supporting chemistry?

| | Chemistry at KS3 | Chemistry at KS4 | Chemistry at KS5 |
|---|---|---|---|
| Very and somewhat confident | 525 (88%) | 510 (86) | 364 (77%) |
| Neither confident nor unconfident | 18 (3%) | 23 (4%) | 37 (8%) |
| Very and somewhat unconfident | 53 (9%) | 62 (10%) | 69 (15%) |
| Column n | 596 | 595 | 470 |

Filter: Technician, England, Wales and Northern Ireland only + not selected 'Do not support'; Unweighted; base n = 446-596

## For each of the levels, how confident are you in supporting chemistry?

| | Chemistry at N4 | Chemistry at N5 | Chemistry at Higher | Chemistry at Advanced Higher |
|---|---|---|---|---|
| Very and somewhat confident | 35 (88%) | 36 (86%) | 35 (83%) | 33 (83%) |
| Neither confident nor unconfident | 1 (3%) | 2 (5%) | 2 (5%) | 2 (5%) |
| Very and somewhat unconfident | 4 (10%) | 4 (10%) | 5 (12%) | 5 (13%) |
| Column n | 40 | 42 | 42 | 40 |

Filter: Technician, Scotland only + not selected 'Do not support'; Unweighted; base n = 34-42

## Thinking about the last 12 months (since February 2024), please select the number of hours of role-specific professional development that you received:

| | % |
|---|---|
| 0 hrs - Didn't access any professional development | 30% |
| Up to 5 hours | 19% |
| 5 - 9 hours | 20% |
| 10 – 14 hours | 9% |
| 15 – 19 hours | 3% |
| 20 - 24 hours | 4% |
| 25 - 29 hours | 1% |
| 30 - 34 hours | 2% |
| 35+ hours | 2% |
| Don't know | 9% |
| Column n | 725 |

Filter: Technicians only + not selected 'Not applicable'; Unweighted; base n = 725

## Thinking again about the last 12 months since February 2024. Was the amount of time that you undertook role-specific professional development…?

| | % |
|---|---|
| Sufficient and somewhat sufficient | 29% |
| Neither sufficient nor insufficient | 19% |
| Insufficient and somewhat insufficient | 48% |
| Don’t know / Can’t remember | 3% |
| Column n | 725 |

Filter: Technicians only; Unweighted; base n = 725

## What are your reasons for leaving your current school?

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 27 (33%) |
| High levels of stress / exhaustion | 36 (44%) |
| Lack of full-time contract (e.g. term time only) | 18 (22%) |
| Low pay | 58 (72%) |
| Lack of progression opportunities | 54 (67%) |
| Lack of job security (e.g. temporary contracts) | 3 (4%) |
| Lack of respect / don’t feel appreciated | 33 (41%) |
| Lack of recognition | 39 (48%) |
| Having to perform tasks outside my role | 23 (28%) |
| Poor student behaviour | 24 (30%) |
| Issues with management | 22 (27%) |
| Want to try something different | 28 (35%) |
| Other | 11 (14%) |
| Don’t know / not sure | 2 (2%) |
| Column n | 81 |

Filter Technicians + not retiring; Unweighted; base n = 81

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a technician at secondary school? Please select up to 5 factors from the following list that would be most influential.

| | % |
|---|---|
| More balanced / reduced workload | 15 (22%) |
| Better work/life balance | 11 (16%) |
| Better job security | 6 (9%) |
| Having the option to work part-time | 5 (7%) |
| Having the option to work remotely/work from home where feasible | 11 (16%) |
| Increased pay | 55 (81%) |
| More opportunity for progression | 44 (65%) |
| More respect / appreciation | 27 (40%) |
| More recognition of work performance | 28 (41%) |
| More support with student behaviour | 10 (15%) |
| More support from senior management team | 21 (31%) |
| Increase funding for classroom/school resources | 18 (26%) |
| Timetabled / regular professional development | 17 (25%) |
| Being able to find a position in a different school | 2 (3%) |
| Other | 6 (9%) |
| There isn’t anything that could convince me | 9 (13%) |
| Column n | 68 |

Filter Technicians + moving out of Secondary education; Unweighted; base n = 68

## Please describe the staffing at your school or college for science technicians. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | 2023 | 2024 | 2025 |
|---|---|---|---|
| Understaffed | 38% | 39% | 38% |
| Column n | 2932 | 1846 | 1871 |

Filter: Teachers only; Unweighted

## Which of the following present challenges to your classroom teaching in science?

| | % |
|---|---|
| No technician/not enough technicians | 27% |
| Column n | 1206 |

Filter: Teachers only; Unweighted; base n = 1206

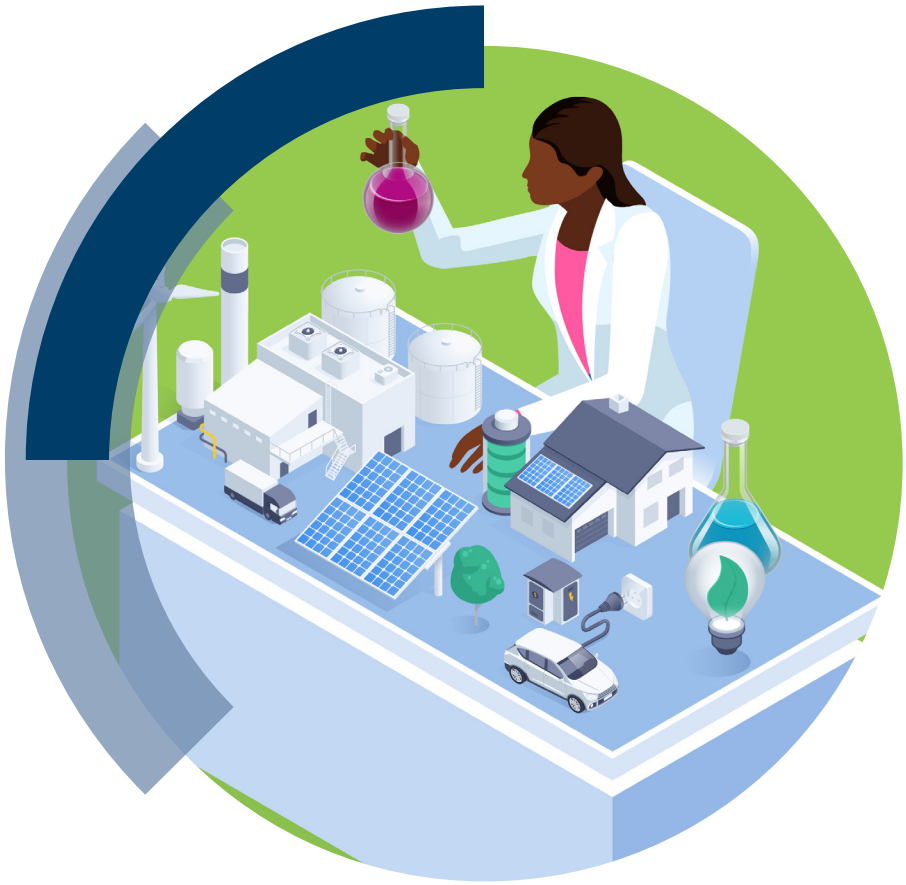
## What are the barriers you face to running practical work in your school?

| | % |
|---|---|
| Understaffing of science technicians | 28% |
| Column n | 1931 |

Filter: Teachers only; Unweighted; base n = 1931

## Science Teaching Survey 2025 Headlines

# Educators face challenges in preparing young people for the future workforce



Nearly 32% of teachers across all school types and nations felt very or somewhat unconfident in providing information on technical and vocational scientific careers.

There are significant barriers to running practical work, including insufficient time, health and safety concerns, cost of consumables and chemicals, and unsuitable labs.

There is an increasing number of teachers reporting insufficient access to subject-specific CPD.

Encouragingly, many respondents reported that they were able to use digital technology in their schools when needed, and that they felt confident in their digital skillset.

## How confident do you feel about providing information on technical/vocational routes into scientific careers?

| | All | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|---|
| Very and somewhat confident | 47% | 48% | 52% | 45% | 40% | 33% |
| Very and somewhat unconfident | 32% | 31% | 31% | 40% | 46% | 49% |
| Column n | 1184 | 897 | 145 | 40 | 57 | 45 |

Filter: Teachers only; Unweighted

## How confident do you feel about the following areas?

| | Linking the curriculum to real-life contexts | Linking the curriculum to scientific careers | Providing information on academic routes into scientific careers | Providing information on technical/ vocational routes into scientific careers |
|---|---|---|---|---|
| Very and somewhat confident | 84% | 80% | 75% | 47% |
| Neither confident nor unconfident | 7% | 9% | 12% | 20% |
| Very and somewhat unconfident | 8% | 10% | 13% | 32% |
| Don't know / Not sure | 0% | 0% | 0% | 1% |
| Column n | 1197 | 1193 | 1190 | 1184 |

Filter: Teachers only + not selected 'Not applicable'; Unweighted; base n = 1184-1197

## What are the barriers you face to running practical work in your school?

| | 2023 | 2025 |
|---|---|---|
| Understaffing of science technicians | 26% | 28% |
| Insufficient time for practical to be taught alongside theory | 57% | 55% |
| Lack of equipment | 31% | 36% |
| No time for training/practicing | 28% | 32% |
| Health and safety concerns | 14% | 19% |
| Challenging student behaviour | 41% | 42% |
| Cost of consumables and chemicals | 33% | 41% |
| Lack of confidence in delivering practical sessions | 6% | 11% |
| Insufficient lab access | 17% | 18% |
| Unsuitable labs | 19% | 25% |
| No barriers | 12% | 7% |
| Other | 7% | 7% |
| Column n | 2456 | 1931 |

Filter: Not select 'Not applicable'; Unweighted; base n = 1631-1898

| | Up to 30% FSM | Over 30% FSM |
|---|---|---|
| Understaffing of science technicians | 27% | 32% |
| Insufficient time for practical to be taught alongside theory | 57% | 59% |
| Lack of equipment | 39% | 39% |
| No time for training/practicing | 33% | 34% |
| Health and safety concerns | 17% | 24% |
| Challenging student behaviour | 44% | 61% |
| Cost of consumables and chemicals | 46% | 39% |
| Lack of confidence in delivering practical sessions | 10% | 13% |
| Insufficient lab access | 15% | 24% |
| Unsuitable labs | 25% | 27% |
| Other | 7% | 8% |
| No barriers | 5% | 4% |
| Column n | 990 | 335 |

Filter: Not select 'Not applicable'; Unweighted; base n = 1631-1898

## Thinking about the last 12 months, with each of your KS3/ Third Level/ Junior Cycle classes, how often did you generally do hands-on practical work in science lessons?

| | KS3 / Third Level / Junior Cycle | GCSE / National 5 / Transition Year | A-Level / Higher / Senior Cycle |
|---|---|---|---|
| At least once a week | 390 (38%) | 210 (19%) | 142 (17%) |
| At least once a fortnight | 380 (37%) | 368 (34%) | 276 (33%) |
| At least once a month | 197 (19%) | 373 (34%) | 305 (36%) |
| Once every couple of months | 44 (4%) | 110 (10%) | 83 (10%) |
| Less often | 16 (2%) | 30 (3%) | 30 (4%) |
| Never | 5 (0%) | 5 (0%) | 5 (1%) |
| Don't know | 1 (0%) | 1 (0%) | 4 (0%) |
| Column n | 1033 | 1097 | 845 |

Total sample; Unweighted; base n = 1931

## To what extent do you agree with the following statement? I am able to use digital technology (e.g. computer room / tablets / laptops / WiFi) when needed.

| | Count | % |
|---|---|---|
| Strongly agree and agree | 1552 | 81% |
| Neither agree nor disagree | 139 | 7% |
| Strongly disagree and disagree | 214 | 11% |
| Don't know / Not sure | 10 | 1% |
| Column n | 1915 | 1915 |

Total sample; Unweighted; base n = 1931

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Strongly agree and agree | 1239 (81%) | 150 (80%) | 62 (79%) | 62 (83%) | 39 (87%) |
| Neither agree nor disagree | 111 (7%) | 14 (7%) | 10 (13%) | 1 (1%) | 3 (7%) |
| Strongly disagree and disagree | 170 (11%) | 24 (13%) | 5 (6%) | 12 (16%) | 3 (7%) |
| Don't know / Not sure | 9 (1%) | 0 (0%) | 1 (1%) | 0 (0%) | 0 (0%) |
| Column n | 1529 | 188 | 78 | 75 | 45 |

Total sample; Unweighted; base n = 1931

## To what extent do you agree with the following statement? I am confident in using digital tools in my teaching.

| | Count | % |
|---|---|---|
| Strongly agree and agree | 741 | 63% |
| Neither agree nor disagree | 249 | 21% |
| Strongly disagree and disagree | 184 | 16% |
| Don't know / Not sure | 12 | 1% |
| Column n | 1186 | |

Filter: Teachers only; Unweighted

| | England | Scotland | Wales | Northern Ireland | Republic of Ireland |
|---|---|---|---|---|---|
| Strongly agree and agree | 565 (62%) | 99 (68%) | 19 (49%) | 30 (53%) | 27 (60%) |
| Neither agree nor disagree | 193 (21%) | 32 (22%) | 6 (15%) | 11 (20%) | 6 (13%) |
| Strongly disagree and disagree | 133 (15%) | 12 (8%) | 12 (31%) | 15 (26%) | 12 (27%) |
| Don't know / Not sure | 10 (1%) | 1 (1%) | 1 (3%) | 0 (0%) | 0 (0%) |
| Column n | 903 | 145 | 39 | 56 | 45 |

Filter: Teachers only; Unweighted

## Thinking about the last 12 months, was the amount of time that you undertook subject specific professional development for **chemistry**…?

| | 2023 | 2024 | 2025 |
|---|---|---|---|
| Sufficient + Somewhat sufficient | 21% | 18% | 24% |
| Somewhat insufficient + Insufficient | 30% | 32% | 41% |
| Column n | 1210 | 1087 | 1175 |

Total sample; Unweighted; base n = 1931

## Thinking about the last 12 months, please select the number of hours of subject specific professional development that you received for **chemistry**.

| | 2023 | 2025 |
|---|---|---|
| 0 hrs - Didn't access any professional development | 49% | 44% |
| Up to 5 hours | 19% | 27% |
| 5 - 9 hours | 6% | 10% |
| 10 – 14 hours | 3% | 4% |
| 15 – 19 hours | 1% | 2% |
| 20 - 24 hours | 1% | 2% |
| 25 - 29 hours | 0% | 1% |
| 30 - 34 hours | 0% | 1% |
| 35+ hours | 1% | 2% |
| Don't know | 1% | 6% |
| Column n | 1547 | 899 |

Filter: Teachers only; Unweighted

## Section A

# About your school

## Summary

Respondents **in England** reported high levels of understaffing of teaching assistants and physics teachers, with only 17% of respondents feeling their school was adequately staffed for teaching assistants.

Equivalent data is available for Wales, Northern Ireland, Scotland and Republic of Ireland.

## Which of the following best describes your current job role?

| | % |
|---|---|
| Head of department/principal teacher – Science | 117 (10%) |
| Head of department/principal teacher – Chemistry | 79 (7%) |
| Head of department/principal teacher – Physics | 41 (3%) |
| Head of department/principal teacher – Biology | 28 (2%) |
| Classroom teacher of science, biology, chemistry and/or physics | 372 (31%) |
| FE lecturer of science, biology, chemistry and/or physics | 4 (0%) |
| Science technician | 493 (41%) |
| Trainee / student science teacher | 0 (0%) |
| Other staff member with science teaching responsibilities, e.g. SLT | 73 (6%) |
| Column n | 1207 |

Filter: State funded secondary schools; Unweighted; base n = 1207

## Which of the following best describes the school where you work?

| | % |
|---|---|
| Local authority, Community, Foundation, or ETB | 227 (19%) |
| Academy (standalone) | 175 (14%) |
| Academy (in a multi-academy trust) | 722 (60%) |
| Grammar school/selective school (any type of state school with selective admissions) | 83 (7%) |
| Column n | 1207 |

Filter: State funded secondary schools; Unweighted; base n = 1207

## Please describe the staffing at your school or college in each of the following areas. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | Biology teachers | Chemistry teachers | Physics teachers | Science technicians | Teaching assistants |
|---|---|---|---|---|---|
| Overstaffed | 187 (16%) | 29 (2%) | 25 (2%) | 13 (1%) | 6 (1%) |
| Adequately staffed | 780 (66%) | 742 (63%) | 520 (44%) | 716 (60%) | 193 (17%) |
| Understaffed | 188 (16%) | 385 (32%) | 614 (52%) | 452 (38%) | 693 (62%) |
| Don't know / Not sure | 32 (3%) | 30 (3%) | 27 (2%) | 12 (1%) | 227 (20%) |
| Column n | 1187 | 1186 | 1186 | 1193 | 1119 |

Filter: Not select 'Not applicable' + State funded secondary schools; Unweighted; base n = 1119-1193

## Which of the following are significantly impacted as a result of understaffing of biology, chemistry, and/or physics teachers?

| | % |
|---|---|
| Learning | **594 (78%)** |
| Behaviour | **337 (44%)** |
| Student motivation | **428 (56%)** |
| GCSE subject choices | **147 (19%)** |
| HE progression routes | **202 (27%)** |
| Other | **87 (11%)** |
| Column n | **758** |

Filter: Selected ‘Understaffed’ only + State funded secondary schools; Unweighted; base n = 758

## Section B

# About your role

### Summary

Technicians broadly report good levels of confidence in supporting the three sciences across the three key stages.

Teachers similarly feel confident in teaching the three sciences, with confidence dropping at key stage 5 (for chemistry, the number of teachers feeling somewhat or very confident in teaching KS4 is 91%, but for KS5 this drops to 66%).

Job satisfaction is slightly higher for technicians than for teachers in England, as is wellbeing.

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

| | % |
|---|---|
| Biology | 272 (38%) |
| Chemistry | 366 (51%) |
| Physics | 231 (32%) |
| General Science | 187 (26%) |
| None of the above | 13 (2%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 714 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 714

## Including the current academic year, how many years have you been teaching the sciences? Please do not include your training year.

| | % |
|---|---|
| 1-2 YRS | 39 (5%) |
| 3-4 YRS | 49 (7%) |
| 5-9 YRS | 155 (22%) |
| 10+ YRS | 1428 (66%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 714 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 714

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

| | % |
|---|---|
| 1-2 YRS | 55 (11%) |
| 3-4 YRS | 55 (11%) |
| 5-9 YRS | 112 (23%) |
| 10+ YRS | 271 (55%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 493 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 493

## For each of the key stages, how confident are you in supporting biology, chemistry and/or physics? If you don't support the particular subject content at a key stage, select 'Do not support'.

| | Biology at KS3 | Biology at KS4 | Biology at KS5 | Chemistry at KS3 | Chemistry at KS4 |
|---|---|---|---|---|---|
| Very unconfident | 37 (8%) | 35 (8%) | 31 (9%) | 38 (8%) | 36 (8%) |
| Somewhat unconfident | 5 (1%) | 12 (3%) | 26 (8%) | 5 (1%) | 17 (4%) |
| Neither confident nor un-confident | 10 (2%) | 19 (4%) | 25 (8%) | 16 (4%) | 17 (4%) |
| Somewhat confident | 73 (16%) | 100 (22%) | 110 (33%) | 66 (15%) | 83 (18%) |
| Very confident | 327 (72%) | 282 (63%) | 140 (42%) | 330 (73%) | 301 (66%) |
| Column n | 452 | 448 | 332 | 455 | 454 |

| | Chemistry at KS5 | Physics at KS3 | Physics at KS4 | Physics at KS5 |
|---|---|---|---|---|
| Very unconfident | 36 (11%) | 37 (8%) | 38 (8%) | 37 (11%) |
| Somewhat unconfident | 21 (6%) | 21 (5%) | 32 (7%) | 56 (17%) |
| Neither confident nor un-confident | 26 (8%) | 25 (5%) | 33 (7%) | 49 (15%) |
| Somewhat confident | 104 (31%) | 100 (22%) | 143 (32%) | 90 (28%) |
| Very confident | 149 (44%) | 274 (60%) | 206 (46%) | 91 (28%) |
| Column n | 336 | 457 | 452 | 323 |

Filter: Technician, England only + not selected 'Do not support' + State funded secondary schools; Unweighted; base n = 323-457

## For each of the levels that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these levels? If you don't teach the particular subject content to a level, either as a single subject or as part of a combined science course, select 'Do not teach'.

| | Biology at KS3 | Biology at KS4 | Biology at KS5 | Chemistry at KS3 | Chemistry at KS4 |
|---|---|---|---|---|---|
| Very unconfident | 24 (4%) | 22 (4%) | 91 (26%) | 17 (3%) | 17 (3%) |
| Somewhat unconfident | 11 (2%) | 54 (9%) | 46 (13%) | 8 (1%) | 18 (3%) |
| Neither confident nor un-confident | 11 (2%) | 40 (7%) | 22 (6%) | 5 (1%) | 23 (4%) |
| Somewhat confident | 109 (17%) | 155 (26%) | 76 (21%) | 74 (11%) | 155 (25%) |
| Very confident | 483 (76%) | 323 (54%) | 121 (34%) | 544 (84%) | 415 (66%) |
| Do not teach | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 638 | 594 | 356 | 648 | 628 |

| | Chemistry at KS5 | Physics at KS3 | Physics at KS4 | Physics at KS5 |
|---|---|---|---|---|
| Very unconfident | 56 (14%) | 17 (3%) | 25 (4%) | 117 (33%) |
| Somewhat unconfident | 52 (13%) | 20 (3%) | 43 (7%) | 53 (15%) |
| Neither confident nor un-confident | 30 (8%) | 19 (3%) | 42 (7%) | 27 (8%) |
| Somewhat confident | 62 (16%) | 135 (21%) | 209 (34%) | 51 (14%) |
| Very confident | 199 (50%) | 456 (70%) | 298 (48%) | 108 (30%) |
| Do not teach | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 399 | 647 | 617 | 356 |

Filter: Teacher, England only + not selected 'Do not teach' + State funded secondary schools; Unweighted; base n = 356-648

## 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?

| | % |
|---|---|
| Mean | 6.3 |
| Column n | 714 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 714

## 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?

| | % |
|---|---|
| Mean | 7.0 |
| Column n | 493 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 493

**The next question is about your mental well-being and will help us to better understand the well-being of teachers and technicians working in education. This question is optional and can be skipped by pressing [next].**

## *Teachers*

| | % |
|---|---|
| High wellbeing (28 or greater) | 72 (10%) |
| Moderate wellbeing (20 - 27) | 476 (67%) |
| Low wellbeing (Less than 20) | 159 (22%) |
| Average (Mean) | 22.4 |
| Column n | 707 |

Filter: Teachers + State funded secondary schools; Unweighted; base n = 707

## *Technicians*

| | % |
|---|---|
| High wellbeing (28 or greater) | 118 (24%) |
| Moderate wellbeing (20 - 27) | 304 (62%) |
| Low wellbeing (Less than 20) | 66 (14%) |
| Average (Mean) | 24.6 |
| Column n | 488 |

Filter: Technicians + State funded secondary schools; Unweighted; base n = 488

## Section C

# Retention

### Summary

When asked how long they intend to stay in their current school, 12% of teacher respondents and 7% of technicians in England selected only to the end of the current academic year.

For teachers, the top reasons given for leaving included high workload (57%) and high levels of stress (55%). For technicians, low pay (76%) and a lack of progression opportunities (64%) were most cited.

## How long do you intend to stay at your current school?

### *Teachers*

| | % |
|---|---|
| Up to the end of the current academic year | 86 (12%) |
| Up to the end of the 25/26 academic year | 72 (10%) |
| Up to the end of the 26/27 academic year | 36 (5%) |
| Into the 27/28 academic year or beyond | 250 (35%) |
| Don't know / Not sure | 261 (37%) |
| Prefer not to say | 9 (1%) |
| Column n | 714 |

Filter Teachers + State funded secondary schools; Unweighted; base n = 714

## How long do you intend to stay at your current school?

### *Technicians*

| | % |
|---|---|
| Up to the end of the current academic year | 36 (7%) |
| Up to the end of the 25/26 academic year | 42 (9%) |
| Up to the end of the 26/27 academic year | 21 (4%) |
| Into the 27/28 academic year or beyond | 180 (37%) |
| Don't know / Not sure | 196 (40%) |
| Prefer not to say | 18 (4%) |
| Column n | 493 |

Filter Technicians + State funded secondary schools; Unweighted; base n = 493

## What are you planning to do after leaving your current school? If you have more than one plan , please select the one that is most likely.

### *Teachers*

| | % |
|---|---|
| Retirement | 33 (17%) |
| Move to a similar role at a different state school | 47 (24%) |
| Move to a different state school for promotion | 35 (18%) |
| Move to a similar role at a private/independent school | 10 (5%) |
| Move to a private/independent school for promotion | 2 (1%) |
| Move into teaching at higher education | 4 (2%) |
| Move into another role in education (not teaching) | 12 (6%) |
| I want to do something outside of education / career change | 25 (13%) |
| Have a career break | 7 (4%) |
| Other | 12 (6%) |
| Don't know / Not sure | 7 (4%) |
| Column n | 194 |

Filter Teachers + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 194

## What are you planning to do after leaving your current school? If you have more than one plan, please select the one that is most likely.

### *Technicians*

| | % |
|---|---|
| Retirement | 44 (44%) |
| Move to a similar role at a different state school | 8 (8%) |
| Move to a different state school for promotion | 2 (2%) |
| Move to a similar role at a private/independent school | 1 (1%) |
| Move to a private/independent school for promotion | 1 (1%) |
| Move into another role in education | 0 (0%) |
| Move to a technician role in HE | 1 (1%) |
| Move to a technician role in FE | 2 (2%) |
| Start training to be a teacher | 3 (3%) |
| I want to do something outside of education / career change | 29 (29%) |
| Other | 4 (4%) |
| Don't know / Not sure | 4 (4%) |
| Column n | 99 |

Filter Technicians + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 99

## What are your reasons for leaving your current school?

### *Teachers*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 92 (57%) |
| High levels of stress / exhaustion | 88 (55%) |
| Having to teach outside specialism | 18 (11%) |
| Low pay | 18 (11%) |
| Lack of progression opportunities | 63 (39%) |
| Lack of respect / don't feel appreciated | 75 (47%) |
| Lack of recognition | 53 (33%) |
| Poor student behaviour | 73 (45%) |
| Issues with management | 65 (40%) |
| Want to try something different | 39 (24%) |
| Other | 31 (19%) |
| Don't know / not sure | 1 (1%) |
| Column n | 161 |

Filter Teachers + not retiring + State funded secondary schools; Unweighted; base n = 161

## What are your reasons for leaving your current school?

### *Technicians*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 17 (31%) |
| High levels of stress / exhaustion | 21 (38%) |
| Lack of full-time contract (e.g. term time only) | 11 (20%) |
| Low pay | 42 (76%) |
| Lack of progression opportunities | 35 (64%) |
| Lack of job security (e.g. temporary contracts) | 1 (2%) |
| Lack of respect / don't feel appreciated | 21 (38%) |
| Lack of recognition | 25 (45%) |
| Having to perform tasks outside my role | 14 (25%) |
| Poor student behaviour | 18 (33%) |
| Issues with management | 14 (25%) |
| Want to try something different | 20 (36%) |
| Other | 8 (15%) |
| Don't know / not sure | 0 (0%) |
| Column n | 55 |

Filter Technicians + not retiring + State funded secondary schools; Unweighted; base n = 55

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a teacher at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Teachers*

| | % |
|---|---|
| More balanced / reduced workload | 37 (67%) |
| Better work/life balance | 40 (73%) |
| Having the option to work part-time | 7 (13%) |
| Having the option to work remotely/work from home where feasible | 19 (35%) |
| Increased pay | 22 (40%) |
| Only expected to teach content you consider yourself a specialist in | 7 (13%) |
| More opportunity for progression | 5 (9%) |
| More respect / appreciation | 18 (33%) |
| More recognition of work performance | 8 (15%) |
| More support with student behaviour | 23 (42%) |
| Less emphasis on exam results | 10 (18%) |
| Less pressure regarding assessed school performance and inspections | 15 (27%) |
| More support from parents | 10 (18%) |
| More support from senior management team | 10 (18%) |
| Increase funding for classroom/school resources | 15 (27%) |
| Timetabled / regular professional development | 0 (0%) |
| Being able to find a position in a different school | 4 (7%) |
| Other | 2 (4%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 55 |

Filter Teachers + moving out of Secondary teaching + State funded secondary schools; Unweighted; base n = 55

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a technician at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Technicians*

| | % |
|---|---|
| More balanced / reduced workload | 8 (19%) |
| Better work/life balance | 6 (14%) |
| Better job security | 1 (2%) |
| Having the option to work part-time | 4 (9%) |
| Having the option to work remotely/work from home where feasible | 4 (9%) |
| Increased pay | 38 (88%) |
| More opportunity for progression | 28 (65%) |
| More respect / appreciation | 14 (33%) |
| More recognition of work performance | 14 (33%) |
| More support with student behaviour | 6 (14%) |
| More support from senior management team | 14 (33%) |
| Increase funding for classroom/school resources | 11 (26%) |
| Timetabled / regular professional development | 10 (23%) |
| Being able to find a position in a different school | 1 (2%) |
| Other | 3 (7%) |
| There isn't anything that could convince me | 4 (9%) |
| Column n | 43 |

Filter Technicians + moving out of Secondary education + State funded secondary schools; Unweighted; base n = 43

## Section D

# Challenges & barriers

### Summary

Teachers reported several challenges at classroom level. Not having enough time out of the classroom was the most cited challenge (74%), followed by not enough classroom time to cover the curriculum content (64%) and challenging student behaviour (62%). Although high, challenging student behaviour was less of a challenge in England compared to Scotland and Wales.

As reported in our headlines, funding is the largest challenge identified at school level, with staff reporting that more funding would help address these challenges.

Respondents identified similar themes when considering barriers to running practical work in their schools. Insufficient time for practical work to be taught alongside theory (57%) and challenging student behaviour (48%) were the highest cited barriers.

## Which of the following present challenges to your classroom teaching in science?

| | % |
|---|---|
| Limited numeracy skills of students | **352 (49%)** |
| Limited literacy skills of students | **385 (54%)** |
| Insufficient classroom support, e.g. no teaching assistants | **336 (47%)** |
| Student attendance | **390 (55%)** |
| Challenging student behaviour | **446 (62%)** |
| Inadequate teaching resources (lesson plans / scheme of work) | **136 (19%)** |
| No technician/not enough technicians | **166 (23%)** |
| Teaching outside of specialism | **118 (17%)** |
| Lack of confidence in the subject area | **30 (4%)** |
| Insufficient lab access | **141 (20%)** |
| Insufficient classroom equipment | **234 (33%)** |
| Not enough classroom time to cover the curriculum content | **455 (64%)** |
| Not enough time outside of classroom (for planning/marking and/or assessment) | **525 (74%)** |
| Other | **57 (8%)** |
| There are no challenges | **11 (2%)** |
| Column n | **714** |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 714

## What challenges does your school face?

| | % |
|---|---|
| Insufficient funding | 748 (62%) |
| High staff turnover | 292 (24%) |
| Insufficient staff non-contact time | 537 (44%) |
| Lack of support to students from parent/family/guardian | 466 (39%) |
| Poor pupil attendance | 391 (32%) |
| Understaffing of teaching staff | 395 (33%) |
| Understaffing of classroom support staff | 561 (46%) |
| High staff absence | 329 (27%) |
| Insufficient support from leadership | 359 (30%) |
| Negative working environment | 199 (16%) |
| Lack of collaboration/teamwork amongst staff | 228 (19%) |
| Not enough support for inexperienced teachers | 274 (23%) |
| Other | 121 (10%) |
| There are no challenges | 38 (3%) |
| Column n | 1207 |

Filter: State funded secondary schools; Unweighted; base n = 1207

## What support do you need to address these challenges, either in the classroom and/or across the school?

| | % |
|---|---|
| Consistent policies including behaviour management, attendance and learning and teaching | 449 (37%) |
| More funding | 823 (68%) |
| More non-contact time (for planning, PD, practising practical work) | 674 (56%) |
| More classroom support staff | 566 (47%) |
| Support from leadership | 410 (34%) |
| Greater access to subject specific professional development | 340 (28%) |
| Greater collaboration with colleagues | 250 (21%) |
| Protected non-contact time | 481 (40%) |
| Leadership led cultural shift | 325 (27%) |
| Other | 79 (7%) |
| Don't require support | 39 (3%) |
| Column n | 1207 |

Filter: State funded secondary schools; Unweighted; base n = 1207

## Thinking about the last 12 months, with each of your KS3 / Third Level / Junior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 183 (30%) | 180 (29%) | 110 (18%) |
| At least once a fortnight | 245 (40%) | 219 (35%) | 112 (18%) |
| At least once a month | 144 (23%) | 168 (27%) | 144 (23%) |
| Once every couple of months | 32 (5%) | 28 (5%) | 100 (16%) |
| Less often | 13 (2%) | 23 (4%) | 123 (20%) |
| Never | 2 (0%) | 2 (0%) | 31 (5%) |
| Don't know | 1 (0%) | 1 (0%) | 1 (0%) |
| Column n | 620 | 621 | 621 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 620-621

## Thinking about the last 12 months, with each of your GCSE / National 5 / Transition Year classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 104 (16%) | 112 (17%) | 93 (14%) |
| At least once a fortnight | 222 (33%) | 218 (33%) | 147 (22%) |
| At least once a month | 242 (37%) | 210 (32%) | 187 (28%) |
| Once every couple of months | 76 (11%) | 86 (13%) | 106 (16%) |
| Less often | 17 (3%) | 35 (5%) | 105 (16%) |
| Never | 1 (0%) | 0 (0%) | 21 (3%) |
| Don't know | 1 (0%) | 2 (0%) | 4 (1%) |
| Column n | 663 | 663 | 663 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 663

## Thinking about the last 12 months, with each of your A-Level / Higher/ Senior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 56 (13%) | 39 (9%) | 29 (7%) |
| At least once a fortnight | 141 (32%) | 98 (22%) | 50 (11%) |
| At least once a month | 177 (40%) | 117 (27%) | 99 (23%) |
| Once every couple of months | 50 (11%) | 61 (14%) | 67 (15%) |
| Less often | 11 (3%) | 89 (20%) | 120 (27%) |
| Never | 2 (0%) | 32 (7%) | 68 (15%) |
| Don't know | 3 (1%) | 3 (1%) | 7 (2%) |
| Column n | 440 | 439 | 440 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 439-440

## What are the barriers you face to running practical work in your school?

| | % |
|---|---|
| Understaffing of science technicians | 325 (27%) |
| Insufficient time for practical to be taught alongside theory | 689 (57%) |
| Lack of equipment | 445 (37%) |
| No time for training/practicing | 397 (33%) |
| Health and safety concerns | 225 (19%) |
| Challenging student behaviour | 584 (48%) |
| Cost of consumables and chemicals | 487 (40%) |
| Lack of confidence in delivering practical sessions | 150 (12%) |
| Insufficient lab access | 236 (20%) |
| Unsuitable labs | 343 (28%) |
| Other | 82 (7%) |
| No barriers | 64 (5%) |
| Column n | 1207 |

Filter: State funded secondary schools; Unweighted; base n = 1207

## Section E

# Professional development

## Summary

Over the period of February 2024 to February 2025, 48% of those teaching chemistry did not access any subject specific professional development (compared to 53% of those teaching biology and 44% of those teaching physics). 30% of science technicians did not access any role-specific professional development in the same time period.

54% of those teaching chemistry felt the amount of time they undertook subject-specific professional development was insufficient, or somewhat insufficient. Teachers reported that course cost & expenses to attend (65%), having to attend courses in their own time (53%), and a lack of funding for cover teachers (53%) were the biggest barriers to accessing subject-specific PD. The top barriers to technicians accessing role-specific PD included course cost & expenses to attend (61%) and the availability of courses (50%).

## Thinking about the last 12 months (since February 2024), please select the number of hours of subject specific professional development that you received for each of the following subjects:If you didn't teach this subject in the last 12 months, please select 'Not applicable - don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| 0 hrs - Didn't access any professional development | 274 (53%) | 277 (48%) | 242 (44%) | 234 (45%) | 144 (32%) |
| Up to 5 hours | 143 (28%) | 171 (30%) | 174 (31%) | 146 (28%) | 72 (16%) |
| 5 - 9 hours | 32 (6%) | 50 (9%) | 55 (10%) | 51 (10%) | 58 (13%) |
| 10 – 14 hours | 9 (2%) | 14 (2%) | 17 (3%) | 29 (6%) | 49 (11%) |
| 15 – 19 hours | 8 (2%) | 6 (1%) | 3 (1%) | 7 (1%) | 25 (6%) |
| 20 - 24 hours | 2 (0%) | 10 (2%) | 9 (2%) | 6 (1%) | 19 (4%) |
| 25 - 29 hours | 8 (2%) | 5 (1%) | 8 (1%) | 2 (0%) | 13 (3%) |
| 30 - 34 hours | 1 (0%) | 4 (1%) | 4 (1%) | 3 (1%) | 19 (4%) |
| 35+ hours | 1 (0%) | 5 (1%) | 8 (1%) | 4 (1%) | 16 (4%) |
| Don't know | 43 (8%) | 37 (6%) | 38 (7%) | 37 (7%) | 39 (9%) |
| Column n | 519 | 578 | 556 | 518 | 451 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 451-578

## Thinking about the last 12 months (since February 2024), please select the number of hours of role-specific professional development that you received:

| SSPD | % |
|---|---|
| 0 hrs - Didn't access any professional development | 149 (30%) |
| Up to 5 hours | 90 (18%) |
| 5 - 9 hours | 92 (19%) |
| 10 – 14 hours | 43 (9%) |
| 15 – 19 hours | 17 (3%) |
| 20 - 24 hours | 23 (5%) |
| 25 - 29 hours | 9 (2%) |
| 30 - 34 hours | 9 (2%) |
| 35+ hours | 10 (2%) |
| Don't know | 51 (10%) |
| Column n | 493 |

Filter: Technicians only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 493

## Thinking again about the last 12 months (since February 2024). Was the amount of time that you undertook subject specific professional development for each subject…?If you didn't teach this subject in the last academic year, please select 'Not applicable – don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| Insufficient | 238 (42%) | 244 (39%) | 241 (40%) | 207 (38%) | 91 (24%) |
| Somewhat insufficient | 91 (16%) | 95 (15%) | 81 (14%) | 63 (12%) | 36 (10%) |
| Neither sufficient nor insufficient | 83 (15%) | 87 (14%) | 85 (14%) | 90 (17%) | 55 (15%) |
| Somewhat sufficient | 47 (8%) | 69 (11%) | 71 (12%) | 60 (11%) | 42 (11%) |
| Sufficient | 81 (14%) | 103 (17%) | 98 (16%) | 92 (17%) | 133 (35%) |
| Don't know / Can't remember | 28 (5%) | 24 (4%) | 21 (4%) | 30 (6%) | 19 (5%) |
| Not applicable – don't teach this subject | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 568 | 622 | 597 | 542 | 376 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 376-622

## Thinking again about the last 12 months since February 2024. Was the amount of time that you undertook role-specific professional development…?

| | % |
|---|---|
| Insufficient | 151 (31%) |
| Somewhat insufficient | 79 (16%) |
| Neither sufficient nor insufficient | 94 (19%) |
| Somewhat sufficient | 66 (13%) |
| Sufficient | 88 (18%) |
| Don’t know / Can’t remember | 15 (3%) |
| Column n | 493 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 493

## Which of the following barriers apply to your own experience of accessing subject specific professional development?

| | % |
|---|---|
| Lack of funding for cover teachers | 379 (53%) |
| Lack of available cover teachers | 310 (43%) |
| Course cost & expenses to attend courses | 462 (65%) |
| School policy restricts the type of courses I can attend | 153 (21%) |
| Having to attend PD courses/training in my own time | 377 (53%) |
| Availability of courses | 237 (33%) |
| Lack of knowledge about opportunities | 236 (33%) |
| Not having access to the required technology/software/learning platforms, etc. | 34 (5%) |
| Prohibitive travel time / distance | 238 (33%) |
| Other | 61 (9%) |
| There are no barriers | 42 (6%) |
| Column n | 714 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 714

## Which of the following barriers apply to your own experience of accessing role-specific professional development?

| | % |
|---|---|
| Lack of funding for cover staff | 52 (11%) |
| Lack of available cover staff | 65 (13%) |
| Course cost & expenses to attend courses | 300 (61%) |
| School policy restricts the type of courses I can attend | 62 (13%) |
| Having to attend PD courses/training in my own time | 53 (11%) |
| Availability of courses | 245 (50%) |
| Lack of knowledge about opportunities | 78 (16%) |
| Not having access to the required technology/software/learning platforms, etc. | 20 (4%) |
| Prohibitive travel time / distance | 231 (47%) |
| There are no barriers | 57 (12%) |
| Column n | 493 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 493

## Why is subject-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 481 (67%) |
| It helps me to develop my expertise in areas I haven't taught before | 407 (57%) |
| It gives me new ideas to improve my teaching based on the latest education research | 576 (81%) |
| It increases my confidence in using practical activities in my lessons | 320 (45%) |
| It helps me to develop teaching approaches to meet specific learner needs | 436 (61%) |
| It helps me contextualise the curriculum | 332 (46%) |
| It allows me to share ideas and learn from other teachers outside of my classroom | 476 (67%) |
| It increases my enthusiasm for my subject | 401 (56%) |
| Other, please elaborate | 17 (2%) |
| It's not important to me | 21 (3%) |
| Column n | 714 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 714

## Why is role-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 311 (63%) |
| It helps me to develop my expertise in health and safety and prep room management | 359 (73%) |
| It gives me new ideas to improve practical activities | 399 (81%) |
| It increases my confidence in my role | 311 (63%) |
| It gives me a deeper knowledge of how practical activities can be used to support the delivery of the curriculum | 322 (65%) |
| It allows me to share ideas and learn from other technicians outside of my school | 372 (75%) |
| It increases my enthusiasm for my job | 301 (61%) |
| Other, please elaborate | 9 (2%) |
| Column n | 493 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 493

## Aside from statutory PD e.g. safeguarding, what are your school's priorities for CPD?

| | % |
|---|---|
| Developing the leadership talent pipeline | 150 (12%) |
| Developing leadership skills of those in post | 156 (13%) |
| Improving teacher subject expertise | 157 (13%) |
| Prioritising whole school PD based on the school improvement plan | 682 (57%) |
| Developing teaching approaches to meet specific learner needs | 425 (35%) |
| Contextualising subjects | 51 (4%) |
| Other, please elaborate | 67 (6%) |
| Don't know | 321 (27%) |
| Column n | 1207 |

Filter: State funded secondary schools; Unweighted; base n = 1207

## Section F

# Vocational pathways

## Summary

We asked teachers about their awareness of and advocacy for different academic and vocational science pathways. Advocacy levels were highest for traditional science pathways (A levels, undergraduate degrees).

It appears that lower levels of advocacy are due to a lack of awareness in teachers of certain pathways (e.g. for some apprenticeships). Despite it being a flagship route at level 3, most teachers are not advocating for their students to complete a T-level in the sciences (only 25% are aware of and advocate for this route).

## How confident do you feel about the following areas?

| | Linking the curriculum to real-life contexts | Linking the curriculum to scientific careers | Providing information on academic routes into scientific careers | Providing information on technical/vocational routes into scientific careers |
|---|---|---|---|---|
| Very unconfident | 16 (2%) | 16 (2%) | 23 (3%) | 49 (7%) |
| Somewhat unconfident | 32 (5%) | 51 (7%) | 65 (9%) | 158 (23%) |
| Neither confident nor unconfident | 55 (8%) | 63 (9%) | 81 (12%) | 152 (22%) |
| Somewhat confident | 335 (47%) | 323 (46%) | 323 (46%) | 243 (35%) |
| Very confident | 269 (38%) | 248 (35%) | 209 (30%) | 95 (14%) |
| Don't know / Not sure | 2 (0%) | 5 (1%) | 3 (0%) | 4 (1%) |
| Not applicable / Don't include in my teaching | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 709 | 706 | 704 | 701 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 701-709

## For each of the following academic and vocational science pathways, please tell us which you are aware of and advocate to your students.

| | A levels | International Baccalaureate | T levels | BTEC Nationals | BTEC Apprenticeships | Cambridge Technicals |
|---|---|---|---|---|---|---|
| Not aware | 5 (1%) | 127 (18%) | 79 (11%) | 70 (10%) | 133 (19%) | 313 (44%) |
| Aware but don't advocate | 30 (4%) | 448 (63%) | 397 (56%) | 295 (41%) | 266 (37%) | 253 (35%) |
| Aware and advocate to my students | 662 (93%) | 74 (10%) | 177 (25%) | 299 (42%) | 257 (36%) | 70 (10%) |
| Don't know / Not sure | 16 (2%) | 64 (9%) | 60 (8%) | 49 (7%) | 57 (8%) | 77 (11%) |
| Column n | 713 | 713 | 713 | 713 | 713 | 713 |

| | NVQs | Advanced Apprenticeships | Higher Apprenticeship | Degree Apprenticeship | Foundation degree | Undergraduate degree |
|---|---|---|---|---|---|---|
| Not aware | 194 (27%) | 184 (26%) | 170 (24%) | 95 (13%) | 66 (9%) | 14 (2%) |
| Aware but don't advocate | 345 (48%) | 160 (22%) | 155 (22%) | 140 (20%) | 201 (28%) | 59 (8%) |
| Aware and advocate to my students | 99 (14%) | 302 (42%) | 319 (45%) | 426 (60%) | 409 (57%) | 624 (88%) |
| Don't know / Not sure | 75 (11%) | 67 (9%) | 69 (10%) | 52 (7%) | 37 (5%) | 16 (2%) |
| Column n | 713 | 713 | 713 | 713 | 713 | 713 |

Filter: Teachers, England only + State funded secondary schools; Unweighted; base n = 713

## What are the barriers, if any, that prevent you from advocating for vocational pathways to your students?

| | % |
|---|---|
| Lack of detailed knowledge about the pathways | 17 (55%) |
| Lack of funding | 4 (13%) |
| Lack of local availability of courses | 4 (13%) |
| Lack of local availability of placements | 2 (6%) |
| School is focused on academic pathways | 4 (13%) |
| Don't know / Not sure | 4 (13%) |
| Other | 5 (16%) |
| There are no barriers | 4 (13%) |
| Column n | 31 |

Filter: Teachers, Not advocated to any vocational pathways only + State funded secondary schools; Unweighted; base n = 31

## What are the barriers for you working with external organisations to deliver outreach activities to your students?

| | % |
|---|---|
| Limited time | 607 (85%) |
| Funding | 422 (59%) |
| Student behaviour | 113 (16%) |
| Lack of support and encouragement from senior leaders | 151 (21%) |
| Lack of interest / engagement from local organisations, companies etc | 175 (25%) |
| Safeguarding concerns | 32 (5%) |
| Lack of awareness of opportunities | 327 (46%) |
| I don't see the benefits for students | 10 (1%) |
| Lack of my time to organise | 509 (72%) |
| Lack of time within the school day to enable this | 437 (61%) |
| Other priorities/pressures (eg Ofsted) | 144 (20%) |
| Lack of interest / engagement from local organisations, companies etc | 7 (1%) |
| Column n | 711 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 711

## Section G

# Digital technology

### Summary

Teachers across the nations appear to have comparable levels of access to digital technology.

80% of teachers in England agree or strongly agree that they can use digital technology when needed and 61% agree or strongly agree that they are confident in using digital tools.

Only 16% of teachers never use digital tools in their science lessons.

## Have you ever used AI within your role?

| | % |
|---|---|
| Yes | 533 (44%) |
| No | 665 (56%) |
| Column n | 1198 |

Filter: State funded secondary schools; Unweighted; base n = 1198

## Which of the following AI-powered tools or technologies (if any) have you used or experimented with in your teaching practice?

| | % |
|---|---|
| Grammarly | 51 (10%) |
| magic.ai | 24 (5%) |
| Teachermatic | 2 (0%) |
| Teachmateai | 52 (10%) |
| Riffbot | 0 (0%) |
| Revisely | 12 (2%) |
| Copilot | 144 (27%) |
| ChatGPT | 468 (88%) |
| DALL-E 3 | 13 (2%) |
| Oak Aila lesson planning tool | 20 (4%) |
| Google Bard | 27 (5%) |
| Other, please provide | 85 (16%) |
| Column n | 532 |

Filter: Have used AI + State funded secondary schools; Unweighted; base n = 532

## To what extent do you agree with the following statement? I am able to use digital technology (e.g. computer room / tablets / laptops / WiFi) when needed.

| | % |
|---|---|
| Strongly agree | 487 (41%) |
| Agree | 463 (39%) |
| Neither agree nor disagree | 91 (8%) |
| Disagree | 86 (7%) |
| Strongly disagree | 64 (5%) |
| Don't know / Not sure | 6 (1%) |
| Column n | 1197 |

Filter: State funded secondary schools; Unweighted; base n = 1197

## How often does your department use digital tools in your lessons, e.g. light gates, digital microscopes?

| | % |
|---|---|
| Every week | 107 (9%) |
| Once a topic (where relevant) | 583 (49%) |
| Once a term | 249 (21%) |
| Never | 188 (16%) |
| Don't know / Not sure | 70 (6%) |
| Column n | 1197 |

Filter: State funded secondary schools; Unweighted; base n = 1197

## To what extent do you agree with the following statement? I am confident in using digital tools in my teaching.

| | % |
|---|---|
| Strongly agree | 147 (21%) |
| Agree | 283 (40%) |
| Neither agree nor disagree | 159 (23%) |
| Disagree | 75 (11%) |
| Strongly disagree | 32 (5%) |
| Don't know / Not sure | 7 (1%) |
| Column n | 703 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 703

## Section H

# Additional support and resources

### Summary

54% of teachers somewhat or strongly agree that students with SEND/ALN have access to the support and resources needed to engage in science lessons comparably with their peers. Similarly, 55% of teachers somewhat or strongly agree that students with SEND/ALN have access to support and resources needed to participate in all practical activities in science lessons.

76% of respondents felt that more teaching assistant support would improve the equitable experience of students with SEND/ALN in science lessons.

## How far do you agree with the following statements?

| | Students with SEND/ALN have access to any additional support/resources needed to engage in science lessons comparably to their peers | Students with SEND/ALN have access to any additional support/ resources needed to participate in all practical activities in science lessons |
|---|---|---|
| Strongly agree | 99 (14%) | 124 (18%) |
| Somewhat agree | 279 (40%) | 259 (37%) |
| Neither agree nor disagree | 114 (16%) | 118 (17%) |
| Somewhat disagree | 136 (20%) | 132 (19%) |
| Strongly disagree | 57 (8%) | 50 (7%) |
| Don't know / Not sure | 12 (2%) | 14 (2%) |
| Column n | 697 | 697 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 697

## For your school/department, what would improve the equitable experience of students with SEND/ALN in science lessons?

| | % |
|---|---|
| More teaching assistant support | 910 (76%) |
| Specialist practical equipment (materials, ear defenders, quiet classroom areas etc) | 432 (36%) |
| More training on specific strategies for SEND/ALN students | 531 (45%) |
| Teaching resources that are accessible for SEND/ALN learners | 571 (48%) |
| Specialist technology | 263 (22%) |
| Other | 70 (6%) |
| Column n | 1190 |

Filter: State funded secondary schools; Unweighted; base n = 1190

## Section A

# About your school

### Summary

Respondents **in Scotland** reported significantly higher understaffing of teaching assistants compared to the other nations of the UK and ROI, with 87% of staff feeling current provision of TAs is not sufficient for their school. The staffing of chemistry teachers in Scotland is the best among the nations, with only 22% of respondents feeling they are understaffed.

Equivalent data is available for Wales, Northern Ireland, England and Republic of Ireland.

## Which of the following best describes your current job role?

| | % |
|---|---|
| Head of department/principal teacher – Science | 16 (9%) |
| Head of department/principal teacher – Chemistry | 2 (1%) |
| Head of department/principal teacher – Physics | 1 (1%) |
| Head of department/principal teacher – Biology | 1 (1%) |
| Classroom teacher of science, biology, chemistry and/or physics | 108 (62%) |
| FE lecturer of science, biology, chemistry and/or physics | 0 (0%) |
| Science technician | 40 (23%) |
| Trainee / student science teacher | 0 (0%) |
| Other staff member with science teaching responsibilities, e.g. SLT | 5 (3%) |
| Column n | 173 |

Filter: State funded secondary schools; Unweighted; base n = 173

## Which of the following best describes the school where you work?

| | % |
|---|---|
| Local authority, Community, Foundation, or ETB | 167 (97%) |
| Academy (standalone) | 5 (3%) |
| Academy (in a multi-academy trust) | 1 (1%) |
| Grammar school/selective school (any type of state school with selective admissions) | 0 (0%) |
| Column n | 173 |

Filter: State funded secondary schools; Unweighted; base n = 173

## Please describe the staffing at your school or college in each of the following areas. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | Biology teachers | Chemistry teachers | Physics teachers | Science technicians | Teaching assistants |
|---|---|---|---|---|---|
| Overstaffed | 23 (13%) | 6 (4%) | 3 (2%) | 1 (1%) | 0 (0%) |
| Adequately staffed | 125 (73%) | 124 (73%) | 107 (63%) | 95 (55%) | 7 (5%) |
| Understaffed | 18 (11%) | 37 (22%) | 56 (33%) | 76 (44%) | 134 (87%) |
| Don't know / Not sure | 5 (3%) | 4 (2%) | 5 (3%) | 0 (0%) | 13 (8%) |
| Column n | 171 | 171 | 171 | 172 | 154 |

Filter: Not select 'Not applicable' + State funded secondary schools; Unweighted; base n = 154-172

## Which of the following are significantly impacted as a result of understaffing of biology, chemistry, and/or physics teachers?

| | % |
|---|---|
| Learning | 62 (84%) |
| Behaviour | 46 (62%) |
| Student motivation | 40 (54%) |
| GCSE subject choices | 26 (35%) |
| HE progression routes | 20 (27%) |
| Other | 18 (24%) |
| Column n | 74 |

Filter: Selected ‘Understaffed’ only + State funded secondary schools; Unweighted; base n = 74

## Section B

# About your role

### Summary

Technicians broadly report good levels of confidence in supporting the three sciences across Nationals, Highers and Advanced Highers.

Teachers generally feel confident in teaching the three sciences at National level. Confidence falls for teachers delivering Highers, and particularly Advanced Highers in chemistry and physics (for chemistry, the number of teachers feeling somewhat or very confident in teaching N5 is 84%, but for Highers this drops to 75%, and for Advanced Highers it falls further to 63%). These confidence levels are lower for Scottish teachers compared to teachers delivering equivalent qualifications in the other nations.

Job satisfaction is higher for technicians than for teachers in Scotland, as is wellbeing.

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

| | % |
|---|---|
| Biology | 40 (30%) |
| Chemistry | 57 (43%) |
| Physics | 56 (42%) |
| General Science | 67 (50%) |
| None of the above | 0 (0%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 133 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 133

## Including the current academic year, how many years have you been teaching the sciences? Please do not include your training year.

| | % |
|---|---|
| 1-2 YRS | 10 (8%) |
| 3-4 YRS | 14 (11%) |
| 5-9 YRS | 28 (21%) |
| 10+ YRS | 266 (61%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 133 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 133

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

| | % |
|---|---|
| 1-2 YRS | 4 (10%) |
| 3-4 YRS | 3 (8%) |
| 5-9 YRS | 8 (20%) |
| 10+ YRS | 25 (63%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 40 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 40

## For each of the levels, how confident are you in supporting biology, chemistry and/or physics? If you don't support the particular subject content to a level, select 'Do not support'.

| | Biology at N4 | Biology at N5 | Biology at Higher | Human Biology at Higher | Biology at Advanced Higher | Chemistry at N4 |
|---|---|---|---|---|---|---|
| Very unconfident | 4 (11%) | 4 (10%) | 3 (8%) | 3 (8%) | 3 (8%) | 4 (11%) |
| Somewhat unconfident | 0 (0%) | 0 (0%) | 1 (3%) | 1 (3%) | 1 (3%) | 0 (0%) |
| Neither confident nor un-confident | 1 (3%) | 1 (3%) | 2 (5%) | 1 (3%) | 3 (8%) | 1 (3%) |
| Somewhat confident | 4 (11%) | 4 (10%) | 9 (24%) | 10 (27%) | 7 (19%) | 9 (24%) |
| Very confident | 28 (76%) | 30 (77%) | 23 (61%) | 22 (59%) | 23 (62%) | 23 (62%) |
| Column n | 37 | 39 | 38 | 37 | 37 | 37 |

| | Chemistry at N5 | Chemistry at Higher | Chemistry at Advanced Higher | Physics at N4 | Physics at N5 | Physics at Higher | Physics at Advanced Higher |
|---|---|---|---|---|---|---|---|
| Very unconfident | 4 (10%) | 3 (8%) | 4 (11%) | 5 (15%) | 5 (14%) | 5 (14%) | 8 (24%) |
| Somewhat unconfident | 0 (0%) | 2 (5%) | 1 (3%) | 4 (12%) | 4 (11%) | 8 (23%) | 5 (15%) |
| Neither confident nor un-confident | 2 (5%) | 2 (5%) | 2 (5%) | 4 (12%) | 5 (14%) | 4 (11%) | 5 (15%) |
| Somewhat confident | 9 (23%) | 11 (28%) | 15 (41%) | 7 (21%) | 10 (29%) | 9 (26%) | 10 (29%) |
| Very confident | 24 (62%) | 21 (54%) | 15 (41%) | 13 (39%) | 11 (31%) | 9 (26%) | 6 (18%) |
| Column n | 39 | 39 | 37 | 33 | 35 | 35 | 34 |

Filter: Technician, Scotland only + not selected 'Do not support' + State funded secondary schools; Unweighted; base n = 33-39

## In which combinations, if any, do you teach multiple qualifications in one class?

| | % |
|---|---|
| N4 with N5 | **90 (68%)** |
| N5 with Higher | **12 (9%)** |
| N3 with N4 | **28 (21%)** |
| N3 with N4 and N5 | **31 (23%)** |
| N4 with N5 and Higher | **5 (4%)** |
| Higher with AH | **7 (5%)** |
| Don't know | **0 (0%)** |
| I do not teach any classes with multiple qualifications but there are elsewhere in my faculty | **11 (8%)** |
| Our faculty does not teach multiple qualifications in one class | **20 (15%)** |
| Other | **4 (3%)** |
| Column n | **133** |

Filter: Teachers, Scotland only + State funded secondary schools; Unweighted; base n = 133

## For each of the levels that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these levels? If you don't teach the particular subject content to a level, either as a single subject or as part of a combined science course, select 'Do not teach'.

| | Biology at N4 | Biology at N5 | Biology at Higher | Human Biology at Higher | Biology at Advanced Higher | Chemistry at N4 |
|---|---|---|---|---|---|---|
| Very unconfident | 0 (0%) | 3 (6%) | 5 (14%) | 5 (14%) | 6 (18%) | 1 (1%) |
| Somewhat unconfident | 4 (7%) | 2 (4%) | 1 (3%) | 3 (9%) | 5 (15%) | 4 (6%) |
| Neither confident nor un-confident | 4 (7%) | 1 (2%) | 3 (8%) | 1 (3%) | 1 (3%) | 4 (6%) |
| Somewhat confident | 14 (25%) | 4 (9%) | 7 (19%) | 9 (26%) | 10 (30%) | 18 (25%) |
| Very confident | 33 (60%) | 37 (79%) | 20 (56%) | 17 (49%) | 11 (33%) | 44 (62%) |
| Column n | 55 | 47 | 36 | 35 | 33 | 71 |

| | Chemistry at N5 | Chemistry at Higher | Chemistry at Advanced Higher | Physics at N4 | Physics at N5 | Physics at Higher | Physics at Advanced Higher |
|---|---|---|---|---|---|---|---|
| Very unconfident | 4 (6%) | 10 (16%) | 12 (21%) | 1 (1%) | 5 (7%) | 9 (14%) | 12 (21%) |
| Somewhat unconfident | 6 (9%) | 5 (8%) | 7 (13%) | 6 (9%) | 3 (4%) | 2 (3%) | 8 (14%) |
| Neither confident nor un-confident | 1 (1%) | 1 (2%) | 2 (4%) | 3 (4%) | 1 (1%) | 3 (5%) | 2 (4%) |
| Somewhat confident | 8 (12%) | 5 (8%) | 15 (27%) | 12 (17%) | 4 (6%) | 6 (9%) | 20 (36%) |
| Very confident | 49 (72%) | 42 (67%) | 20 (36%) | 48 (69%) | 55 (81%) | 45 (69%) | 14 (25%) |
| Column n | 68 | 63 | 56 | 70 | 68 | 65 | 56 |

Filter: Teacher, Scotland only + not selected 'Do not teach' + State funded secondary schools; Unweighted; base n = 33-71

## In your school, are the sciences commonly taught in English, Gaelic, or both?

| | Biology in the BGE | Biology at National 5 | Biology at Higher | Chemistry in the BGE | Chemistry at National 5 | Chemistry at Higher | Physics in the BGE | Physics at National 5 | Physics at Higher |
|---|---|---|---|---|---|---|---|---|---|
| English | 130 (98%) | 133 (100%) | 133 (100%) | 131 (98%) | 133 (100%) | 133 (100%) | 131 (98%) | 133 (100%) | 133 (100%) |
| Gaelic | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Both | 3 (2%) | 0 (0%) | 0 (0%) | 2 (2%) | 0 (0%) | 0 (0%) | 2 (2%) | 0 (0%) | 0 (0%) |
| Column n | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 | 133 |

Filter: Teacher, Scotland only + State funded secondary schools; Unweighted; base n = 133

## How confident do you feel teaching the sciences in Gaelic?

| | Biology in the BGE | Biology at National 5 | Biology at Higher | Chemistry in the BGE | Chemistry at National 5 | Chemistry at Higher | Physics in the BGE | Physics at National 5 | Physics at Higher |
|---|---|---|---|---|---|---|---|---|---|
| Very confident | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Somewhat confident | 1 (100%) | 0 (0%) | 0 (0%) | 1 (100%) | 0 (0%) | 0 (0%) | 1 (100%) | 0 (0%) | 0 (0%) |
| Neither confident nor unconfident | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Somewhat unconfident | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Very unconfident | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (100%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Don't know / Not sure | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 1* | 0 | 0 | 1* | 1* | 0 | 1* | 0 | 0 |

Filter: Teacher, Scotland only + Subject taught in Gaelic + State funded secondary schools; Unweighted; base n = 1. *Small sample size.

## 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?

| | % |
|---|---|
| Mean | 5.9 |
| Column n | 133 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 133

## 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?

| | % |
|---|---|
| Mean | 6.8 |
| Column n | 40 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 40

In line with findings from our previous surveys, teachers in Scotland still report high levels of teaching multiple qualifications in one class. This includes mixing N4 and N5 (68% report delivering this combination), N3 and N4 (21%), and N5 with Highers (9%). Only 15% of respondents did not teach multiple qualifications in one class.

Respondents to this survey rarely teach the sciences in Gaelic, with 100% of National 5 and Higher chemistry lessons being taught in English.

## The next question is about your mental well-being and will help us to better understand the well-being of teachers and technicians working in education. This question is optional and can be skipped by pressing [next].

### *Teachers*

| | % |
|---|---|
| High wellbeing (28 or greater) | 17 (13%) |
| Moderate wellbeing (20 - 27) | 73 (56%) |
| Low wellbeing (Less than 20) | 41 (31%) |
| Average (Mean) | 21.9 |
| Column n | 131 |

Filter: Teachers + State funded secondary schools; Unweighted; base n = 131

### *Technicians*

| | % |
|---|---|
| High wellbeing (28 or greater) | 8 (20%) |
| Moderate wellbeing (20 - 27) | 25 (63%) |
| Low wellbeing (Less than 20) | 7 (18%) |
| Average (Mean) | 24.2 |
| Column n | 40 |

Filter: Technicians + State funded secondary schools; Unweighted; base n = 40

## Section C

# Retention

### Summary

When asked how long they intend to stay in their current school, 12% of teacher respondents and 0% of technicians in Scotland selected only to the end of the current academic year.

Poor student behaviour (55%) and issues with management (70%) were more commonly cited by teachers as reasons for leaving compared to teachers in England.

The reasons given by technicians for leaving are available below, but sample size is too small for comment.

## How long do you intend to stay at your current school?

### *Teachers*

| | % |
|---|---|
| Up to the end of the current academic year | 16 (12%) |
| Up to the end of the 25/26 academic year | 5 (4%) |
| Up to the end of the 26/27 academic year | 6 (5%) |
| Into the 27/28 academic year or beyond | 53 (40%) |
| Don't know / Not sure | 52 (39%) |
| Prefer not to say | 1 (1%) |
| Column n | 133 |

Filter Teachers + State funded secondary schools; Unweighted; base n = 133

## How long do you intend to stay at your current school?

### *Technicians*

| | % |
|---|---|
| Up to the end of the current academic year | 0 (0%) |
| Up to the end of the 25/26 academic year | 1 (3%) |
| Up to the end of the 26/27 academic year | 2 (5%) |
| Into the 27/28 academic year or beyond | 17 (43%) |
| Don't know / Not sure | 18 (45%) |
| Prefer not to say | 2 (5%) |
| Column n | 40 |

Filter Technicians + State funded secondary schools; Unweighted; base n = 40

## What are you planning to do after leaving your current school? If you have more than one plan , please select the one that is most likely.

### *Teachers*

| | % |
|---|---|
| Retirement | 7 (26%) |
| Move to a similar role at a different state school | 10 (37%) |
| Move to a different state school for promotion | 1 (4%) |
| Move to a similar role at a private/independent school | 1 (4%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into teaching at higher education | 0 (0%) |
| Move into another role in education (not teaching) | 1 (4%) |
| I want to do something outside of education / career change | 2 (7%) |
| Have a career break | 0 (0%) |
| Other | 4 (15%) |
| Don't know / Not sure | 1 (4%) |
| Column n | 27* |

Filter Teachers + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 27.
*Small sample size.

## What are you planning to do after leaving your current school? If you have more than one plan, please select the one that is most likely.

### *Technicians*

| | % |
|---|---|
| Retirement | 2 (67%) |
| Move to a similar role at a different state school | 0 (0%) |
| Move to a different state school for promotion | 0 (0%) |
| Move to a similar role at a private/independent school | 0 (0%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into another role in education | 0 (0%) |
| Move to a technician role in HE | 0 (0%) |
| Move to a technician role in FE | 0 (0%) |
| Start training to be a teacher | 0 (0%) |
| I want to do something outside of education / career change | 0 (0%) |
| Other | 1 (33%) |
| Don't know / Not sure | 0 (0%) |
| Column n | 3* |

Filter Technicians + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 3.
*Small sample size.

## What are your reasons for leaving your current school?

### *Teachers*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 12 (60%) |
| High levels of stress / exhaustion | 12 (60%) |
| Having to teach outside specialism | 2 (10%) |
| Low pay | 1 (5%) |
| Lack of progression opportunities | 8 (40%) |
| Lack of respect / don't feel appreciated | 11 (55%) |
| Lack of recognition | 10 (50%) |
| Poor student behaviour | 11 (55%) |
| Issues with management | 14 (70%) |
| Want to try something different | 0 (0%) |
| Other | 10 (50%) |
| Don't know / not sure | 0 (0%) |
| Column n | 20* |

Filter Teachers + not retiring + State funded secondary schools; Unweighted; base n = 20. *Small sample size.

## What are your reasons for leaving your current school?

### *Technicians*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 0 (0%) |
| High levels of stress / exhaustion | 0 (0%) |
| Lack of full-time contract (e.g. term time only) | 0 (0%) |
| Low pay | 0 (0%) |
| Lack of pwrogression opportunities | 0 (0%) |
| Lack of job security (e.g. temporary contracts) | 0 (0%) |
| Lack of respect / don't feel appreciated | 0 (0%) |
| Lack of recognition | 0 (0%) |
| Having to perform tasks outside my role | 0 (0%) |
| Poor student behaviour | 0 (0%) |
| Issues with management | 0 (0%) |
| Want to try something different | 0 (0%) |
| Other | 0 (0%) |
| Don't know / not sure | 1 (100%) |
| Column n | 1* |

Filter Technicians + not retiring + State funded secondary schools; Unweighted; base n = 1. *Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a teacher at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Teachers*

| | % |
|---|---|
| More balanced / reduced workload | 4 (100%) |
| Better work/life balance | 2 (50%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 0 (0%) |
| Increased pay | 1 (25%) |
| Only expected to teach content you consider yourself a specialist in | 0 (0%) |
| More opportunity for progression | 2 (50%) |
| More respect / appreciation | 0 (0%) |
| More recognition of work performance | 1 (25%) |
| More support with student behaviour | 2 (50%) |
| Less emphasis on exam results | 1 (25%) |
| Less pressure regarding assessed school performance and inspections | 1 (25%) |
| More support from parents | 0 (0%) |
| More support from senior management team | 1 (25%) |
| Increase funding for classroom/school resources | 2 (50%) |
| Timetabled / regular professional development | 0 (0%) |
| Being able to find a position in a different school | 0 (0%) |
| Other | 1 (25%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 4* |

Filter Teachers + moving out of Secondary teaching + State funded secondary schools; Unweighted; base n = 4.
*Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a technician at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Technicians*

| | % |
|---|---|
| More balanced / reduced workload | 0 (0%) |
| Better work/life balance | 0 (0%) |
| Better job security | 0 (0%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 0 (0%) |
| Increased pay | 0 (0%) |
| More opportunity for progression | 0 (0%) |
| More respect / appreciation | 0 (0%) |
| More recognition of work performance | 0 (0%) |
| More support with student behaviour | 0 (0%) |
| More support from senior management team | 0 (0%) |
| Increase funding for classroom/school resources | 0 (0%) |
| Timetabled / regular professional development | 0 (0%) |
| Being able to find a position in a different school | 0 (0%) |
| Other | 1 (100%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 1* |

Filter Technicians + moving out of Secondary education + State funded secondary schools; Unweighted; base n = 1. *Small sample size.

## Section D

# Challenges & barriers

### Summary

Teachers reported several challenges at classroom level. Limited numeracy and literacy skills of students were among the most cited challenges (82 and 77% respectively), along with student attendance (79%). The feeling of challenge associated with the limited numeracy and literacy skills of students was notably greater than all other nations. Both student attendance and challenging student behaviour were higher than all other nations except for Wales where levels are comparably high.

As reported in our headlines, funding is the largest challenge identified at school level (although an equal challenge in Scotland is the understaffing of classroom support staff).

Respondents identified similar themes when considering barriers to running practical work in their schools. The cost of consumables and chemicals (61%) and insufficient time for practical work to be taught alongside theory (61%) were the highest cited barriers.

## Which of the following present challenges to your classroom teaching in science?

| | % |
|---|---|
| Limited numeracy skills of students | 109 (82%) |
| Limited literacy skills of students | 103 (77%) |
| Insufficient classroom support, e.g. no teaching assistants | 92 (69%) |
| Student attendance | 105 (79%) |
| Challenging student behaviour | 103 (77%) |
| Inadequate teaching resources (lesson plans / scheme of work) | 29 (22%) |
| No technician/not enough technicians | 37 (28%) |
| Teaching outside of specialism | 7 (5%) |
| Lack of confidence in the subject area | 4 (3%) |
| Insufficient lab access | 12 (9%) |
| Insufficient classroom equipment | 59 (44%) |
| Not enough classroom time to cover the curriculum content | 76 (57%) |
| Not enough time outside of classroom (for planning/marking and/or assessment) | 104 (78%) |
| Other | 21 (16%) |
| There are no challenges | 0 (0%) |
| Column n | 133 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 133

## What challenges does your school face?

| | % |
|---|---|
| Insufficient funding | 118 (68%) |
| High staff turnover | 43 (25%) |
| Insufficient staff non-contact time | 85 (49%) |
| Lack of support to students from parent/family/guardian | 69 (40%) |
| Poor pupil attendance | 98 (57%) |
| Understaffing of teaching staff | 57 (33%) |
| Understaffing of classroom support staff | 118 (68%) |
| High staff absence | 67 (39%) |
| Insufficient support from leadership | 87 (50%) |
| Negative working environment | 51 (29%) |
| Lack of collaboration/teamwork amongst staff | 42 (24%) |
| Not enough support for inexperienced teachers | 31 (18%) |
| Other | 24 (14%) |
| There are no challenges | 0 (0%) |
| Column n | 173 |

Filter: State funded secondary schools; Unweighted; base n = 173

## What support do you need to address these challenges, either in the classroom and/or across the school?

| | % |
|---|---|
| Consistent policies including behaviour management, attendance and learning and teaching | 102 (59%) |
| More funding | 119 (69%) |
| More non-contact time (for planning, PD, practising practical work) | 110 (64%) |
| More classroom support staff | 117 (68%) |
| Support from leadership | 89 (51%) |
| Greater access to subject specific professional development | 61 (35%) |
| Greater collaboration with colleagues | 50 (29%) |
| Protected non-contact time | 77 (45%) |
| Leadership led cultural shift | 68 (39%) |
| Other | 22 (13%) |
| Don't require support | 0 (0%) |
| Column n | 173 |

Filter: State funded secondary schools; Unweighted; base n = 173

## Thinking about the last 12 months, with each of your KS3 / Third Level/ Junior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 89 (69%) | 51 (40%) | 17 (13%) |
| At least once a fortnight | 32 (25%) | 41 (32%) | 17 (13%) |
| At least once a month | 6 (5%) | 24 (19%) | 21 (16%) |
| Once every couple of months | 2 (2%) | 6 (5%) | 22 (17%) |
| Less often | 0 (0%) | 7 (5%) | 43 (33%) |
| Never | 0 (0%) | 0 (0%) | 10 (8%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 129 | 129 | 130 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 129-130

## Thinking about the last 12 months, with each of your GCSE / National 5/ Transition Year classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 25 (20%) | 16 (13%) | 7 (6%) |
| At least once a fortnight | 45 (35%) | 38 (30%) | 21 (17%) |
| At least once a month | 43 (34%) | 41 (32%) | 25 (20%) |
| Once every couple of months | 10 (8%) | 13 (10%) | 34 (27%) |
| Less often | 3 (2%) | 16 (13%) | 28 (22%) |
| Never | 1 (1%) | 3 (2%) | 10 (8%) |
| Don't know | 0 (0%) | 0 (0%) | 2 (2%) |
| Column n | 127 | 127 | 127 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 127

## Thinking about the last 12 months, with each of your A-Level / Higher / Senior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 15 (13%) | 9 (8%) | 4 (3%) |
| At least once a fortnight | 32 (27%) | 26 (22%) | 11 (9%) |
| At least once a month | 44 (37%) | 30 (25%) | 27 (23%) |
| Once every couple of months | 16 (13%) | 21 (18%) | 26 (22%) |
| Less often | 12 (10%) | 26 (22%) | 34 (28%) |
| Never | 1 (1%) | 7 (6%) | 16 (13%) |
| Don't know | 0 (0%) | 1 (1%) | 2 (2%) |
| Column n | 120 | 120 | 120 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 120

## What are the barriers you face to running practical work in your school?

| | % |
|---|---|
| Understaffing of science technicians | 55 (32%) |
| Insufficient time for practical to be taught alongside theory | 105 (61%) |
| Lack of equipment | 92 (53%) |
| No time for training/practicing | 55 (32%) |
| Health and safety concerns | 31 (18%) |
| Challenging student behaviour | 87 (50%) |
| Cost of consumables and chemicals | 106 (61%) |
| Lack of confidence in delivering practical sessions | 11 (6%) |
| Insufficient lab access | 10 (6%) |
| Unsuitable labs | 24 (14%) |
| Other | 19 (11%) |
| No barriers | 2 (1%) |
| Column n | 173 |

Filter: State funded secondary schools; Unweighted; base n = 173

## Section E

# Professional development

## Summary

Over the period of February 2024 to February 2025, 22% of those teaching chemistry did not access any subject specific professional development (compared to 33% of those teaching biology and 23% of those teaching physics). 28% of science technicians did not access any role-specific professional development in the same time period.

41% of those teaching chemistry felt the amount of time they undertook subject-specific professional development was insufficient, or somewhat insufficient. Teachers reported that course cost & expenses to attend (72%), having to attend courses in their own time (62%), and a lack of funding for cover teachers (58%) were the biggest barriers to accessing subject-specific PD. The top barriers to technicians accessing role-specific PD included the availability of courses (65%) and course cost & expenses to attend (58%).

Broadly, teachers and technicians in Scotland have better access to role- or subject-specific professional development, and are more satisfied with the time spent doing so, compared to teachers in England and Wales.

## Thinking about the last 12 months (since February 2024), please select the number of hours of subject specific professional development that you received for each of the following subjects:If you didn't teach this subject in the last 12 months, please select 'Not applicable - don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| 0 hrs - Didn't access any professional development | 16 (33%) | 14 (22%) | 15 (23%) | 39 (34%) | 9 (14%) |
| Up to 5 hours | 9 (18%) | 18 (28%) | 17 (26%) | 36 (32%) | 12 (19%) |
| 5 - 9 hours | 6 (12%) | 10 (15%) | 13 (20%) | 13 (11%) | 12 (19%) |
| 10 – 14 hours | 3 (6%) | 6 (9%) | 8 (12%) | 7 (6%) | 11 (17%) |
| 15 – 19 hours | 4 (8%) | 7 (11%) | 3 (5%) | 4 (4%) | 3 (5%) |
| 20 - 24 hours | 3 (6%) | 4 (6%) | 4 (6%) | 4 (4%) | 6 (9%) |
| 25 - 29 hours | 4 (8%) | 2 (3%) | 3 (5%) | 3 (3%) | 1 (2%) |
| 30 - 34 hours | 0 (0%) | 2 (3%) | 1 (2%) | 1 (1%) | 4 (6%) |
| 35+ hours | 1 (2%) | 1 (2%) | 2 (3%) | 0 (0%) | 5 (8%) |
| Don't know | 3 (6%) | 2 (3%) | 1 (2%) | 7 (6%) | 1 (2%) |
| Column n | 49 | 65 | 66 | 114 | 64 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 49-114

## Thinking about the last 12 months (since February 2024), please select the number of hours of role-specific professional development that you received:

| SSPD | % |
|---|---|
| 0 hrs - Didn't access any professional development | 11 (28%) |
| Up to 5 hours | 9 (23%) |
| 5 - 9 hours | 5 (13%) |
| 10 – 14 hours | 4 (10%) |
| 15 – 19 hours | 3 (8%) |
| 20 - 24 hours | 2 (5%) |
| 25 - 29 hours | 1 (3%) |
| 30 - 34 hours | 1 (3%) |
| 35+ hours | 0 (0%) |
| Don't know | 4 (10%) |
| Column n | 40 |

Filter: Technicians only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 40

## Thinking again about the last 12 months (since February 2024). Was the amount of time that you undertook subject specific professional development for each subject…? If you didn't teach this subject in the last academic year, please select 'Not applicable – don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| Insufficient | 12 (23%) | 10 (15%) | 14 (22%) | 28 (24%) | 3 (5%) |
| Somewhat insufficient | 13 (25%) | 17 (26%) | 16 (25%) | 30 (25%) | 6 (11%) |
| Neither sufficient nor insufficient | 10 (19%) | 7 (11%) | 3 (5%) | 18 (15%) | 11 (20%) |
| Somewhat sufficient | 6 (11%) | 14 (22%) | 13 (21%) | 19 (16%) | 11 (20%) |
| Sufficient | 11 (21%) | 16 (25%) | 15 (24%) | 19 (16%) | 20 (36%) |
| Don't know / Can't remember | 1 (2%) | 1 (2%) | 2 (3%) | 4 (3%) | 4 (7%) |
| Not applicable – don't teach this subject | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 53 | 65 | 63 | 118 | 55 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 53-118

## Thinking again about the last 12 months since February 2024. Was the amount of time that you undertook role-specific professional development…?

| | % |
|---|---|
| Insufficient | 7 (18%) |
| Somewhat insufficient | 8 (20%) |
| Neither sufficient nor insufficient | 9 (23%) |
| Somewhat sufficient | 8 (20%) |
| Sufficient | 6 (15%) |
| Don’t know / Can’t remember | 2 (5%) |
| Column n | 40 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 40

## Which of the following barriers apply to your own experience of accessing subject specific professional development?

| | % |
|---|---|
| Lack of funding for cover teachers | 77 (58%) |
| Lack of available cover teachers | 72 (54%) |
| Course cost & expenses to attend courses | 96 (72%) |
| School policy restricts the type of courses I can attend | 24 (18%) |
| Having to attend PD courses/training in my own time | 82 (62%) |
| Availability of courses | 55 (41%) |
| Lack of knowledge about opportunities | 46 (35%) |
| Not having access to the required technology/software/learning platforms, etc. | 7 (5%) |
| Prohibitive travel time / distance | 68 (51%) |
| Other | 11 (8%) |
| There are no barriers | 2 (2%) |
| Column n | 133 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 133

## Which of the following barriers apply to your own experience of accessing role-specific professional development?

| | % |
|---|---|
| Lack of funding for cover staff | 3 (8%) |
| Lack of available cover staff | 13 (33%) |
| Course cost & expenses to attend courses | 23 (58%) |
| School policy restricts the type of courses I can attend | 1 (3%) |
| Having to attend PD courses/training in my own time | 7 (18%) |
| Availability of courses | 26 (65%) |
| Lack of knowledge about opportunities | 10 (25%) |
| Not having access to the required technology/software/learning platforms, etc. | 7 (18%) |
| Prohibitive travel time / distance | 17 (43%) |
| There are no barriers | 2 (5%) |
| Column n | 40 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 40

## Why is subject-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 92 (69%) |
| It helps me to develop my expertise in areas I haven't taught before | 81 (61%) |
| It gives me new ideas to improve my teaching based on the latest education research | 115 (86%) |
| It increases my confidence in using practical activities in my lessons | 81 (61%) |
| It helps me to develop teaching approaches to meet specific learner needs | 89 (67%) |
| It helps me contextualise the curriculum | 68 (51%) |
| It allows me to share ideas and learn from other teachers outside of my classroom | 109 (82%) |
| It increases my enthusiasm for my subject | 90 (68%) |
| Other, please elaborate | 2 (2%) |
| It's not important to me | 2 (2%) |
| Column n | 133 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 133

## Why is role-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 32 (80%) |
| It helps me to develop my expertise in health and safety and prep room management | 36 (90%) |
| It gives me new ideas to improve practical activities | 33 (83%) |
| It increases my confidence in my role | 31 (78%) |
| It gives me a deeper knowledge of how practical activities can be used to support the delivery of the curriculum | 32 (80%) |
| It allows me to share ideas and learn from other technicians outside of my school | 35 (88%) |
| It increases my enthusiasm for my job | 26 (65%) |
| Other, please elaborate | 1 (3%) |
| Column n | 40 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 40

## Aside from statutory PD e.g. safeguarding, what are your school's priorities for CPD?

| | % |
|---|---|
| Developing the leadership talent pipeline | 11 (6%) |
| Developing leadership skills of those in post | 11 (6%) |
| Improving teacher subject expertise | 6 (3%) |
| Prioritising whole school PD based on the school improvement plan | 106 (61%) |
| Developing teaching approaches to meet specific learner needs | 49 (28%) |
| Contextualising subjects | 3 (2%) |
| Other, please elaborate | 15 (9%) |
| Don't know | 46 (27%) |
| Column n | 173 |

Filter: State funded secondary schools; Unweighted; base n = 173

## Section F

# Vocational pathways

### Summary

Scottish teachers report good confidence in linking the curriculum to both real-life contexts and scientific careers, with 85% feeling somewhat or very confident in both areas.

We asked teachers about their awareness of and advocacy for different academic and vocational science pathways. Teacher advocacy levels were highest for traditional routes into the sciences (Highers, Advanced Highers, undergraduate degrees). It appears that lower levels of advocacy are due to a lack of awareness in teachers of certain pathways (e.g. for some apprenticeships). Only 16% of teachers are aware of and advocate for SVQs.

## How confident do you feel about the following areas?

| | Linking the curriculum to real-life contexts | Linking the curriculum to scientific careers | Providing information on academic routes into scientific careers | Providing information on technical/vocational routes into scientific careers |
|---|---|---|---|---|
| Very unconfident | 2 (2%) | 2 (2%) | 2 (2%) | 5 (4%) |
| Somewhat unconfident | 10 (8%) | 9 (7%) | 13 (10%) | 36 (27%) |
| Neither confident nor unconfident | 7 (5%) | 10 (8%) | 16 (12%) | 23 (17%) |
| Somewhat confident | 67 (50%) | 66 (50%) | 65 (49%) | 50 (38%) |
| Very confident | 47 (35%) | 46 (35%) | 36 (27%) | 17 (13%) |
| Don’t know / Not sure | 0 (0%) | 0 (0%) | 0 (0%) | 1 (1%) |
| Not applicable / Don’t include in my teaching | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 133 | 133 | 132 | 132 |

Filter: Teachers only + not selected ‘Not applicable’ + State funded secondary schools; Unweighted; base n = 132-133

## For each of the following academic and vocational science pathways, please tell us which you are aware of and advocate to your students.

| | Highers | Advanced Highers | International Baccalaureate | National Progression Award (NPA) | SVQs |
|---|---|---|---|---|---|
| Not aware | 0 (0%) | 1 (1%) | 25 (19%) | 9 (7%) | 30 (23%) |
| Aware but don't advocate | 3 (2%) | 9 (7%) | 84 (64%) | 49 (37%) | 68 (52%) |
| Aware and advocate to my students | 128 (97%) | 121 (92%) | 13 (10%) | 70 (53%) | 21 (16%) |
| Don't know / Not sure | 1 (1%) | 1 (1%) | 10 (8%) | 4 (3%) | 13 (10%) |
| Column n | 132 | 132 | 132 | 132 | 132 |

| | Foundation Apprenticeship | Modern Apprenticeship | Graduate Apprenticeship | Further Education courses (e.g. HNC/HND) | Undergraduate degree |
|---|---|---|---|---|---|
| Not aware | 12 (9%) | 13 (10%) | 17 (13%) | 4 (3%) | 0 (0%) |
| Aware but don't advocate | 49 (37%) | 41 (31%) | 47 (36%) | 32 (24%) | 10 (8%) |
| Aware and advocate to my students | 64 (48%) | 70 (53%) | 61 (46%) | 90 (68%) | 119 (90%) |
| Don't know / Not sure | 7 (5%) | 8 (6%) | 7 (5%) | 6 (5%) | 3 (2%) |
| Column n | 132 | 132 | 132 | 132 | 132 |

Filter: Teachers, Scotland only + State funded secondary schools; Unweighted; base n = 132

## What are the barriers, if any, that prevent you from advocating for vocational pathways to your students?

| | % |
|---|---|
| Lack of detailed knowledge about the pathways | 3 (75%) |
| Lack of funding | 0 (0%) |
| Lack of local availability of courses | 1 (25%) |
| Lack of local availability of placements | 1 (25%) |
| School is focused on academic pathways | 1 (25%) |
| Don't know / Not sure | 0 (0%) |
| Other | 1 (25%) |
| There are no barriers | 0 (0%) |
| Column n | 4* |

Filter: Teachers, Not advocated to any vocational pathways only + State funded secondary schools; Unweighted; base n = 4. *Small sample size.

## What are the barriers for you working with external organisations to deliver outreach activities to your students?

| | % |
|---|---|
| Limited time | 112 (85%) |
| Funding | 79 (60%) |
| Student behaviour | 30 (23%) |
| Lack of support and encouragement from senior leaders | 30 (23%) |
| Lack of interest / engagement from local organisations, companies etc | 27 (20%) |
| Safeguarding concerns | 7 (5%) |
| Lack of awareness of opportunities | 61 (46%) |
| I don't see the benefits for students | 1 (1%) |
| Lack of my time to organise | 104 (79%) |
| Lack of time within the school day to enable this | 94 (71%) |
| Other priorities/pressures (eg Ofsted) | 26 (20%) |
| Lack of interest / engagement from local organisations, companies etc | 0 (0%) |
| Column n | 132 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 132

## Section G

# Digital technology

### Summary

Teachers across the nations appear to have comparable levels of access to digital technology. 79% of teachers in Scotland agree or strongly agree that they can use digital technology when needed and 69% agree or strongly agree that they are confident in using digital tools.

Only 9% of teachers never use digital tools in their science lessons. Teachers in Scotland report higher confidence in this area compared to the other nations.

## Have you ever used AI within your role?

| | % |
|---|---|
| Yes | 82 (48%) |
| No | 90 (52%) |
| Column n | 172 |

Filter: State funded secondary schools; Unweighted; base n = 172

## Which of the following AI-powered tools or technologies (if any) have you used or experimented with in your teaching practice?

| | % |
|---|---|
| Grammarly | 14 (17%) |
| magic.ai | 9 (11%) |
| Teachermatic | 0 (0%) |
| Teachmateai | 13 (16%) |
| Riffbot | 0 (0%) |
| Revisely | 1 (1%) |
| Copilot | 22 (27%) |
| ChatGPT | 71 (87%) |
| DALL-E 3 | 1 (1%) |
| Oak Aila lesson planning tool | 1 (1%) |
| Google Bard | 4 (5%) |
| Other, please provide | 17 (21%) |
| Column n | 82 |

Filter: Have used AI + State funded secondary schools; Unweighted; base n = 82

## To what extent do you agree with the following statement?I am able to use digital technology (e.g. computer room / tablets / laptops / WiFi) when needed.

| | % |
|---|---|
| Strongly agree | 73 (42%) |
| Agree | 63 (37%) |
| Neither agree nor disagree | 14 (8%) |
| Disagree | 7 (4%) |
| Strongly disagree | 15 (9%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 172 |

Filter: State funded secondary schools; Unweighted; base n = 172

## How often does your department use digital tools in your lessons, e.g. light gates, digital microscopes?

| | % |
|---|---|
| Every week | 35 (20%) |
| Once a topic (where relevant) | 86 (50%) |
| Once a term | 21 (12%) |
| Never | 16 (9%) |
| Don’t know / Not sure | 14 (8%) |
| Column n | 172 |

Filter: State funded secondary schools; Unweighted; base n = 172

## To what extent do you agree with the following statement? I am confident in using digital tools in my teaching.

| | % |
|---|---|
| Strongly agree | 43 (33%) |
| Agree | 48 (36%) |
| Neither agree nor disagree | 29 (22%) |
| Disagree | 7 (5%) |
| Strongly disagree | 3 (2%) |
| Don’t know / Not sure | 1 (1%) |
| Column n | 132 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 132

## Are you aware of, or have you been involved with the curriculum improvement cycle for Science in Scotland?

| | % |
|---|---|
| Yes | 64 (48%) |
| No | 58 (44%) |
| Don't know / Not sure | 10 (8%) |
| Column n | 132 |

Filter: Teachers, Scotland only + State funded secondary schools; Unweighted; base n = 132

## Where did you hear about this?

| | % |
|---|---|
| Education Scotland on X (Twitter) | 7 (11%) |
| Education Scotland website | 22 (34%) |
| Education Scotland Instagram | 2 (3%) |
| Via school communications | 25 (39%) |
| Via local authority communications | 14 (22%) |
| Word of mouth (i.e from teachers online or face to face) | 27 (42%) |
| Other | 13 (20%) |
| Column n | 64 |

Filter: Teachers, Scotland + Have heard or are aware of the curriculum improvement cycle only + State funded secondary schools; Unweighted; base n = 64

## Section H

# Additional support and resources

### Summary

SEND/ALN students in Scotland have less access to resources and support they need compared to the other nations of the UK. 38% of teachers somewhat or strongly agree that students with SEND/ALN have access to the support and resources needed to engage in science lessons comparably with their peers (compared to 54% in England and 47% in Wales). 42% of teachers somewhat or strongly agree that students with SEND/ALN have access to support and resources needed to participate in all practical activities in science lessons.

86% of respondents felt that more teaching assistant support would improve the equitable experience of students with SEND/ALN in science lessons.

## How far do you agree with the following statements?

| | Students with SEND/ALN have access to any additional support/resources needed to engage in science lessons comparably to their peers | Students with SEND/ALN have access to any additional support/ resources needed to participate in all practical activities in science lessons |
|---|---|---|
| Strongly agree | 4 (3%) | 5 (4%) |
| Somewhat agree | 45 (35%) | 49 (38%) |
| Neither agree nor disagree | 11 (9%) | 14 (11%) |
| Somewhat disagree | 46 (36%) | 39 (30%) |
| Strongly disagree | 22 (17%) | 19 (15%) |
| Don't know / Not sure | 1 (1%) | 3 (2%) |
| Column n | 129 | 129 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 129

## For your school/department, what would improve the equitable experience of students with SEND/ALN in science lessons?

| | % |
|---|---|
| More teaching assistant support | 146 (86%) |
| Specialist practical equipment (materials, ear defenders, quiet classroom areas etc) | 62 (37%) |
| More training on specific strategies for SEND/ALN students | 84 (50%) |
| Teaching resources that are accessible for SEND/ALN learners | 102 (60%) |
| Specialist technology | 47 (28%) |
| Other | 11 (7%) |
| Column n | 169 |

Filter: State funded secondary schools; Unweighted; base n = 169

## Section A

# About your school

## Summary

Respondents **in Wales** reported higher levels of understaffing for certain elements of the science teaching workforce compared to the rest of the UK and ROI. The understaffing of teaching assistants and science technicians is particularly pronounced, at 77% and 55% respectively. The understaffing of chemistry teachers is second highest across the nations, with 40% of schools reporting being understaffed.

Equivalent data is available for England, Northern Ireland, Scotland and Republic of Ireland.

## Which of the following best describes your current job role?

| | % |
|---|---|
| Head of department/principal teacher – Science | 11 (15%) |
| Head of department/principal teacher – Chemistry | 7 (10%) |
| Head of department/principal teacher – Physics | 4 (6%) |
| Head of department/principal teacher – Biology | 4 (6%) |
| Classroom teacher of science, biology, chemistry and/or physics | 8 (11%) |
| FE lecturer of science, biology, chemistry and/or physics | 0 (0%) |
| Science technician | 34 (47%) |
| Trainee / student science teacher | 0 (0%) |
| Other staff member with science teaching responsibilities, e.g. SLT | 4 (6%) |
| Column n | 72 |

Filter: State funded secondary schools; Unweighted; base n = 72

## Which of the following best describes the school where you work?

| | % |
|---|---|
| Local authority, Community, Foundation, or ETB | 71 (99%) |
| Academy (standalone) | 0 (0%) |
| Academy (in a multi-academy trust) | 0 (0%) |
| Grammar school/selective school (any type of state school with selective admissions) | 1 (1%) |
| Column n | 72 |

Filter: State funded secondary schools; Unweighted; base n = 72

## Please describe the staffing at your school or college in each of the following areas. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | Biology teachers | Chemistry teachers | Physics teachers | Science technicians | Teaching assistants |
|---|---|---|---|---|---|
| Overstaffed | 10 (14%) | 2 (3%) | 1 (1%) | 0 (0%) | 1 (1%) |
| Adequately staffed | 48 (67%) | 40 (56%) | 37 (51%) | 28 (39%) | 6 (9%) |
| Understaffed | 13 (18%) | 29 (40%) | 34 (47%) | 39 (55%) | 53 (77%) |
| Don't know / Not sure | 1 (1%) | 1 (1%) | 0 (0%) | 4 (6%) | 9 (13%) |
| Column n | 72 | 72 | 72 | 71 | 69 |

Filter: Not select 'Not applicable' + State funded secondary schools; Unweighted; base n = 69-72

## Which of the following are significantly impacted as a result of understaffing of biology, chemistry, and/or physics teachers?

| | % |
|---|---|
| Learning | 36 (71%) |
| Behaviour | 31 (61%) |
| Student motivation | 32 (63%) |
| GCSE subject choices | 14 (27%) |
| HE progression routes | 14 (27%) |
| Other | 7 (14%) |
| Column n | 51 |

Filter: Selected 'Understaffed' only + State funded secondary schools; Unweighted; base n = 51

## Section B

# About your role

### Summary

Comparably to England, technicians broadly report good levels of confidence in supporting the three sciences across the three key stages. Teachers similarly feel confident in teaching the three sciences. Confidence drops at key stage 5, but less so compared to teachers in England (for chemistry, the number of teachers feeling somewhat or very confident in teaching KS4 is 88%, but for KS5 this drops to 78%).

Job satisfaction is slightly higher for technicians than for teachers, but lower overall compared to England. The wellbeing of staff is comparable to the other nations.

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

| | % |
|---|---|
| Biology | 12 (32%) |
| Chemistry | 23 (61%) |
| Physics | 13 (34%) |
| General Science | 5 (13%) |
| None of the above | 0 (0%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 38 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 38

## Including the current academic year, how many years have you been teaching the sciences? Please do not include your training year.

| | % |
|---|---|
| 1-2 YRS | 0 (0%) |
| 3-4 YRS | 1 (3%) |
| 5-9 YRS | 7 (18%) |
| 10+ YRS | 76 (79%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 38 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 38

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

| | % |
|---|---|
| 1-2 YRS | 8 (24%) |
| 3-4 YRS | 4 (12%) |
| 5-9 YRS | 8 (24%) |
| 10+ YRS | 14 (41%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 34 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 34

## For each of the key stages, how confident are you in supporting biology, chemistry and/or physics? If you don't support the particular subject content at a key stage, select 'Do not support'.

| | 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 unconfident | 3 (9%) | 2 (6%) | 1 (4%) | 3 (9%) | 2 (6%) | 1 (4%) | 3 (9%) | 2 (6%) | 1 (5%) |
| Somewhat unconfident | 0 (0%) | 0 (0%) | 2 (9%) | 0 (0%) | 0 (0%) | 1 (4%) | 3 (9%) | 5 (16%) | 6 (27%) |
| Neither confident nor un-confident | 0 (0%) | 1 (3%) | 1 (4%) | 0 (0%) | 2 (6%) | 1 (4%) | 1 (3%) | 3 (10%) | 4 (18%) |
| Somewhat confident | 7 (21%) | 9 (28%) | 9 (39%) | 6 (18%) | 12 (39%) | 12 (52%) | 10 (31%) | 11 (35%) | 9 (41%) |
| Very confident | 23 (70%) | 20 (63%) | 10 (43%) | 24 (73%) | 15 (48%) | 8 (35%) | 15 (47%) | 10 (32%) | 2 (9%) |
| Column n | 33 | 32 | 23* | 33 | 31 | 23* | 32 | 31 | 22* |

Filter: Technician, Wales only + not selected 'Do not support' + State funded secondary schools; Unweighted; base n = 22-33. *Small sample size.

## For each of the levels that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these levels? If you don't teach the particular subject content to a level, either as a single subject or as part of a combined science course, select 'Do not teach'.

| | 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 unconfident | 0 (0%) | 1 (4%) | 2 (11%) | 0 (0%) | 0 (0%) | 2 (9%) | 0 (0%) | 0 (0%) | 5 (23%) |
| Somewhat unconfident | 0 (0%) | 2 (7%) | 1 (6%) | 0 (0%) | 1 (3%) | 3 (14%) | 0 (0%) | 1 (3%) | 5 (23%) |
| Neither confident nor un-confident | 1 (3%) | 2 (7%) | 2 (11%) | 0 (0%) | 3 (9%) | 0 (0%) | 0 (0%) | 3 (9%) | 1 (5%) |
| Somewhat confident | 7 (20%) | 5 (18%) | 5 (28%) | 3 (8%) | 4 (13%) | 5 (23%) | 8 (23%) | 12 (36%) | 0 (0%) |
| Very confident | 27 (77%) | 18 (64%) | 8 (44%) | 33 (92%) | 24 (75%) | 12 (55%) | 27 (77%) | 17 (52%) | 11 (50%) |
| Do not teach | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 35 | 28* | 18* | 36 | 32 | 22* | 35 | 33 | 22* |

Filter: Teacher, Wales only + not selected 'Do not teach' + State funded secondary schools; Unweighted; base n = 18-36. *Small sample size.

## How many hours per week were/are/will be allocated at GCSE for:

| Average (Mean) | 2023/24 | 2024/25 | 2025/26 |
|---|---|---|---|
| Foundation / Entry level science | 0.57 | 0.45 | 0.31 |
| Single applied science | 1.05 | 1.03 | 1.00 |
| GCSE Science (Double Award) | 5.90 | 6.01 | 6.00 |
| GCSE Applied Science (Double Award) | 2.44 | 2.18 | 2.25 |
| Triple science (please combine hours for all three subjects) | 7.59 | 7.19 | 6.32 |
| English (please combine the hours for Language and Literature) | 6.07 | 6.11 | 6.14 |
| Maths (please combine mathematics and numeracy | 6.07 | 6.10 | 6.14 |
| Column n | 38 | 38 | 38 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 38

## In your school, are the sciences commonly taught in English, Welsh, or both?

| | Biology at KS3 | Biology at KS4 | Biology at KS5 / post-16 | Chemistry at KS3 | Chemistry at KS4 | Chemistry at KS5 / post-16 | Physics at KS3 | Physics at KS4 | Physics at KS5 / post-16 |
|---|---|---|---|---|---|---|---|---|---|
| English | 32 (84%) | 33 (87%) | 33 (87%) | 33 (87%) | 32 (84%) | 33 (87%) | 32 (84%) | 33 (87%) | 33 (87%) |
| Welsh | 4 (11%) | 4 (11%) | 4 (11%) | 4 (11%) | 5 (13%) | 4 (11%) | 4 (11%) | 3 (8%) | 4 (11%) |
| Both | 2 (5%) | 1 (3%) | 1 (3%) | 1 (3%) | 1 (3%) | 1 (3%) | 2 (5%) | 2 (5%) | 1 (3%) |
| Column n | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 |

Filter: Teacher, Wales only + State funded secondary schools; Unweighted; base n = 38

## How confident do you feel teaching the sciences in Welsh?

| | 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 confident | 3 (50%) | 2 (50%) | 2 (67%) | 5 (100%) | 4 (80%) | 3 (75%) | 5 (100%) | 5 (100%) | 3 (75%) |
| Somewhat confident | 2 (33%) | 1 (25%) | 0 (0%) | 0 (0%) | 1 (20%) | 1 (25%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Neither confident nor unconfident | 0 (0%) | 1 (25%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (25%) |
| Somewhat unconfident | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Very unconfident | 1 (17%) | 0 (0%) | 1 (33%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Don't know / Not sure | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 6* | 4* | 3* | 5* | 5* | 4* | 5* | 5* | 4* |

Filter: Teacher, Wales only + Subject taught in Welsh + State funded secondary schools; Unweighted; base n = 3-6.
*Small sample size.

## 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?

| | % |
|---|---|
| Mean | 5.8 |
| Column n | 38 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 38

## 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?

| | % |
|---|---|
| Mean | 6.4 |
| Column n | 34 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 34

Teachers in Wales anticipate a reduction in the number of hours their school will allocate for triple science in 2025/26. It is unclear what is the cause for this drop, as the new science pathways at GCSE will be first taught in September 2026. There is also not a corresponding increase in anticipated hours for English and maths in the same time period.

## The next question is about your mental well-being and will help us to better understand the well-being of teachers and technicians working in education. This question is optional and can be skipped by pressing [next].

### *Teachers*

| | % |
|---|---|
| High wellbeing (28 or greater) | 3 (8%) |
| Moderate wellbeing (20 - 27) | 22 (59%) |
| Low wellbeing (Less than 20) | 12 (32%) |
| Average (Mean) | 21.2 |
| Column n | 37 |

Filter: Teachers + State funded secondary schools; Unweighted; base n = 37

### *Technicians*

| | % |
|---|---|
| High wellbeing (28 or greater) | 4 (12%) |
| Moderate wellbeing (20 - 27) | 23 (68%) |
| Low wellbeing (Less than 20) | 7 (21%) |
| Average (Mean) | 22.7 |
| Column n | 34 |

Filter: Technicians + State funded secondary schools; Unweighted; base n = 34

## Section C

# Retention

### Summary

When asked how long they intend to stay in their current school, 5% of teacher respondents and 12% of technicians in Wales selected only to the end of the current academic year. The reasons given for leaving are available below, but sample size is too small for comment.

## How long do you intend to stay at your current school?

### *Teachers*

| | % |
|---|---|
| Up to the end of the current academic year | 2 (5%) |
| Up to the end of the 25/26 academic year | 1 (3%) |
| Up to the end of the 26/27 academic year | 1 (3%) |
| Into the 27/28 academic year or beyond | 14 (37%) |
| Don't know / Not sure | 18 (47%) |
| Prefer not to say | 2 (5%) |
| Column n | 38 |

Filter Teachers + State funded secondary schools; Unweighted; base n = 38

## How long do you intend to stay at your current school?

### *Technicians*

| | % |
|---|---|
| Up to the end of the current academic year | 4 (12%) |
| Up to the end of the 25/26 academic year | 0 (0%) |
| Up to the end of the 26/27 academic year | 3 (9%) |
| Into the 27/28 academic year or beyond | 7 (21%) |
| Don't know / Not sure | 20 (59%) |
| Prefer not to say | 0 (0%) |
| Column n | 34 |

Filter Technicians + State funded secondary schools; Unweighted; base n = 34

## What are you planning to do after leaving your current school? If you have more than one plan , please select the one that is most likely.

### *Teachers*

| | % |
|---|---|
| Retirement | 0 (0%) |
| Move to a similar role at a different state school | 0 (0%) |
| Move to a different state school for promotion | 1 (25%) |
| Move to a similar role at a private/independent school | 0 (0%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into teaching at higher education | 0 (0%) |
| Move into another role in education (not teaching) | 1 (25%) |
| I want to do something outside of education / career change | 1 (25%) |
| Have a career break | 0 (0%) |
| Other | 0 (0%) |
| Don't know / Not sure | 1 (25%) |
| Column n | 4* |

Filter Teachers + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 4.
*Small sample size.

## What are you planning to do after leaving your current school? If you have more than one plan, please select the one that is most likely.

### *Technicians*

| | % |
|---|---|
| Retirement | 1 (14%) |
| Move to a similar role at a different state school | 0 (0%) |
| Move to a different state school for promotion | 0 (0%) |
| Move to a similar role at a private/independent school | 0 (0%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into another role in education | 1 (14%) |
| Move to a technician role in HE | 1 (14%) |
| Move to a technician role in FE | 0 (0%) |
| Start training to be a teacher | 0 (0%) |
| I want to do something outside of education / career change | 0 (0%) |
| Other | 3 (43%) |
| Don't know / Not sure | 1 (14%) |
| Column n | 7* |

Filter Technicians + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 7.
*Small sample size.

## What are your reasons for leaving your current school?

### *Teachers*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 4 (100%) |
| High levels of stress / exhaustion | 2 (50%) |
| Having to teach outside specialism | 0 (0%) |
| Low pay | 3 (75%) |
| Lack of progression opportunities | 2 (50%) |
| Lack of respect / don't feel appreciated | 4 (100%) |
| Lack of recognition | 3 (75%) |
| Poor student behaviour | 4 (100%) |
| Issues with management | 2 (50%) |
| Want to try something different | 1 (25%) |
| Other | 0 (0%) |
| Don't know / not sure | 0 (0%) |
| Column n | 4* |

Filter Teachers + not retiring + State funded secondary schools; Unweighted; base n = 4. *Small sample size.

## What are your reasons for leaving your current school?

### *Technicians*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 4 (67%) |
| High levels of stress / exhaustion | 5 (83%) |
| Lack of full-time contract (e.g. term time only) | 3 (50%) |
| Low pay | 4 (67%) |
| Lack of progression opportunities | 5 (83%) |
| Lack of job security (e.g. temporary contracts) | 2 (33%) |
| Lack of respect / don't feel appreciated | 3 (50%) |
| Lack of recognition | 5 (83%) |
| Having to perform tasks outside my role | 2 (33%) |
| Poor student behaviour | 2 (33%) |
| Issues with management | 3 (50%) |
| Want to try something different | 1 (17%) |
| Other | 2 (33%) |
| Don't know / not sure | 0 (0%) |
| Column n | 6* |

Filter Technicians + not retiring + State funded secondary schools; Unweighted; base n = 6. *Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a teacher at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Teachers*

| | % |
|---|---|
| More balanced / reduced workload | 1 (33%) |
| Better work/life balance | 3 (100%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 0 (0%) |
| Increased pay | 3 (100%) |
| Only expected to teach content you consider yourself a specialist in | 0 (0%) |
| More opportunity for progression | 2 (67%) |
| More respect / appreciation | 1 (33%) |
| More recognition of work performance | 1 (33%) |
| More support with student behaviour | 1 (33%) |
| Less emphasis on exam results | 0 (0%) |
| Less pressure regarding assessed school performance and inspections | 0 (0%) |
| More support from parents | 0 (0%) |
| More support from senior management team | 0 (0%) |
| Increase funding for classroom/school resources | 2 (67%) |
| Timetabled / regular professional development | 1 (33%) |
| Being able to find a position in a different school | 0 (0%) |
| Other | 0 (0%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 3* |

Filter Teachers + moving out of Secondary teaching + State funded secondary schools; Unweighted; base n = 3.
*Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a technician at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Technicians*

| | % |
|---|---|
| More balanced / reduced workload | 4 (67%) |
| Better work/life balance | 2 (33%) |
| Better job security | 2 (33%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 2 (33%) |
| Increased pay | 6 (100%) |
| More opportunity for progression | 5 (83%) |
| More respect / appreciation | 5 (83%) |
| More recognition of work performance | 5 (83%) |
| More support with student behaviour | 1 (17%) |
| More support from senior management team | 2 (33%) |
| Increase funding for classroom/school resources | 2 (33%) |
| Timetabled / regular professional development | 4 (67%) |
| Being able to find a position in a different school | 1 (17%) |
| Other | 1 (17%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 6* |

Filter Technicians + moving out of Secondary education + State funded secondary schools; Unweighted; base n = 6. *Small sample size.

## Section D

# Challenges & barriers

## Summary

Teachers reported several challenges at classroom level. Student attendance was the most cited challenge (79%), followed by challenging student behaviour (76%) and not enough time outside of the classroom (74%). Both student attendance and challenging student behaviour were higher than all other nations except for Scotland where levels are comparably high.

As reported in our headlines, funding is by far the largest challenge identified at school level, with staff reporting that more funding would help address these challenges. For mainstream schools the funding challenge reported is significantly higher in Wales compared to the other nations.

Respondents identified similar themes when considering barriers to running practical work in their schools. Cost of consumables and chemicals (64%), insufficient time for practical work to be taught alongside theory (60%) and challenging student behaviour (58%) were the highest cited barriers.

## Which of the following present challenges to your classroom teaching in science?

| | % |
|---|---|
| Limited numeracy skills of students | 26 (68%) |
| Limited literacy skills of students | 25 (66%) |
| Insufficient classroom support, e.g. no teaching assistants | 19 (50%) |
| Student attendance | 30 (79%) |
| Challenging student behaviour | 29 (76%) |
| Inadequate teaching resources (lesson plans / scheme of work) | 9 (24%) |
| No technician/not enough technicians | 11 (29%) |
| Teaching outside of specialism | 4 (11%) |
| Lack of confidence in the subject area | 1 (3%) |
| Insufficient lab access | 2 (5%) |
| Insufficient classroom equipment | 10 (26%) |
| Not enough classroom time to cover the curriculum content | 21 (55%) |
| Not enough time outside of classroom (for planning/marking and/or assessment) | 28 (74%) |
| Other | 4 (11%) |
| There are no challenges | 1 (3%) |
| Column n | 38 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 38

## What challenges does your school face?

| | % |
|---|---|
| Insufficient funding | 57 (79%) |
| High staff turnover | 16 (22%) |
| Insufficient staff non-contact time | 28 (39%) |
| Lack of support to students from parent/family/guardian | 41 (57%) |
| Poor pupil attendance | 41 (57%) |
| Understaffing of teaching staff | 22 (31%) |
| Understaffing of classroom support staff | 38 (53%) |
| High staff absence | 26 (36%) |
| Insufficient support from leadership | 37 (51%) |
| Negative working environment | 27 (38%) |
| Lack of collaboration/teamwork amongst staff | 18 (25%) |
| Not enough support for inexperienced teachers | 21 (29%) |
| Other | 13 (18%) |
| There are no challenges | 2 (3%) |
| Column n | 72 |

Filter: State funded secondary schools; Unweighted; base n = 72

## What support do you need to address these challenges, either in the classroom and/or across the school?

| | % |
|---|---|
| Consistent policies including behaviour management, attendance and learning and teaching | 39 (54%) |
| More funding | 52 (72%) |
| More non-contact time (for planning, PD, practising practical work) | 47 (65%) |
| More classroom support staff | 34 (47%) |
| Support from leadership | 40 (56%) |
| Greater access to subject specific professional development | 26 (36%) |
| Greater collaboration with colleagues | 21 (29%) |
| Protected non-contact time | 28 (39%) |
| Leadership led cultural shift | 34 (47%) |
| Other | 9 (13%) |
| Don't require support | 1 (1%) |
| Column n | 72 |

Filter: State funded secondary schools; Unweighted; base n = 72

## Thinking about the last 12 months, with each of your KS3 / Third Level / Junior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 13 (36%) | 13 (36%) | 6 (17%) |
| At least once a fortnight | 12 (33%) | 13 (36%) | 9 (25%) |
| At least once a month | 10 (28%) | 8 (22%) | 4 (11%) |
| Once every couple of months | 1 (3%) | 2 (6%) | 8 (22%) |
| Less often | 0 (0%) | 0 (0%) | 6 (17%) |
| Never | 0 (0%) | 0 (0%) | 3 (8%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 36 | 36 | 36 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 36

## Thinking about the last 12 months, with each of your GCSE / National 5/ Transition Year classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 5 (13%) | 6 (16%) | 4 (11%) |
| At least once a fortnight | 11 (29%) | 13 (34%) | 5 (13%) |
| At least once a month | 15 (39%) | 12 (32%) | 10 (26%) |
| Once every couple of months | 5 (13%) | 4 (11%) | 6 (16%) |
| Less often | 2 (5%) | 2 (5%) | 10 (26%) |
| Never | 0 (0%) | 0 (0%) | 3 (8%) |
| Don't know | 0 (0%) | 1 (3%) | 0 (0%) |
| Column n | 38 | 38 | 38 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 38

## Thinking about the last 12 months, with each of your A-Level / Higher/ Senior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 2 (8%) | 2 (8%) | 2 (8%) |
| At least once a fortnight | 8 (32%) | 12 (48%) | 4 (16%) |
| At least once a month | 13 (52%) | 4 (16%) | 6 (24%) |
| Once every couple of months | 1 (4%) | 2 (8%) | 5 (20%) |
| Less often | 1 (4%) | 5 (20%) | 4 (16%) |
| Never | 0 (0%) | 0 (0%) | 3 (12%) |
| Don't know | 0 (0%) | 0 (0%) | 1 (4%) |
| Column n | 25 | 25 | 25 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 25

## What are the barriers you face to running practical work in your school?

| | % |
|---|---|
| Understaffing of science technicians | 30 (42%) |
| Insufficient time for practical to be taught alongside theory | 43 (60%) |
| Lack of equipment | 32 (44%) |
| No time for training/practicing | 25 (35%) |
| Health and safety concerns | 18 (25%) |
| Challenging student behaviour | 42 (58%) |
| Cost of consumables and chemicals | 46 (64%) |
| Lack of confidence in delivering practical sessions | 4 (6%) |
| Insufficient lab access | 12 (17%) |
| Unsuitable labs | 15 (21%) |
| Other | 5 (7%) |
| No barriers | 1 (1%) |
| Column n | 72 |

Filter: State funded secondary schools; Unweighted; base n = 72

## Section E

# Professional development

## Summary

Over the period of February 2024 to February 2025, 50% of those teaching chemistry did not access any subject specific professional development (compared to 75% of those teaching biology and 58% of those teaching physics). 38% of science technicians did not access any role-specific professional development in the same time period.

57% of those teaching chemistry felt the amount of time they undertook subject-specific professional development was insufficient, or somewhat insufficient. Teachers reported that a lack of funding for cover teachers (76%), course cost & expenses to attend (71%) and having to attend courses in their own time (58%) were the biggest barriers to accessing subject-specific PD. The top barriers to technicians accessing role-specific PD included course cost & expenses to attend (82%), prohibitive travel time (71%), and the availability of courses (65%).

## Thinking about the last 12 months (since February 2024), please select the number of hours of subject specific professional development that you received for each of the following subjects:If you didn't teach this subject in the last 12 months, please select 'Not applicable - don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| 0 hrs - Didn't access any professional development | 18 (75%) | 14 (50%) | 15 (58%) | 16 (55%) | 9 (41%) |
| Up to 5 hours | 4 (17%) | 6 (21%) | 4 (15%) | 9 (31%) | 4 (18%) |
| 5 - 9 hours | 1 (4%) | 3 (11%) | 2 (8%) | 4 (14%) | 0 (0%) |
| 10 – 14 hours | 0 (0%) | 1 (4%) | 2 (8%) | 0 (0%) | 1 (5%) |
| 15 – 19 hours | 0 (0%) | 1 (4%) | 2 (8%) | 0 (0%) | 3 (14%) |
| 20 - 24 hours | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 3 (14%) |
| 25 - 29 hours | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 2 (9%) |
| 30 - 34 hours | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| 35+ hours | 0 (0%) | 2 (7%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Don't know | 1 (4%) | 1 (4%) | 1 (4%) | 0 (0%) | 1 (5%) |
| Column n | 24* | 28* | 26* | 29* | 22* |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 22-29. *Small sample size.

## Thinking about the last 12 months (since February 2024), please select the number of hours of role-specific professional development that you received:

| SSPD | % |
|---|---|
| 0 hrs - Didn't access any professional development | 13 (38%) |
| Up to 5 hours | 5 (15%) |
| 5 - 9 hours | 6 (18%) |
| 10 – 14 hours | 3 (9%) |
| 15 – 19 hours | 1 (3%) |
| 20 - 24 hours | 2 (6%) |
| 25 - 29 hours | 0 (0%) |
| 30 - 34 hours | 0 (0%) |
| 35+ hours | 1 (3%) |
| Don't know | 3 (9%) |
| Column n | 34 |

Filter: Technicians only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 34

## Thinking again about the last 12 months (since February 2024). Was the amount of time that you undertook subject specific professional development for each subject…? If you didn't teach this subject in the last academic year, please select 'Not applicable – don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| Insufficient | 16 (62%) | 11 (37%) | 11 (39%) | 15 (52%) | 7 (39%) |
| Somewhat insufficient | 4 (15%) | 6 (20%) | 7 (25%) | 5 (17%) | 2 (11%) |
| Neither sufficient nor insufficient | 4 (15%) | 8 (27%) | 6 (21%) | 6 (21%) | 5 (28%) |
| Somewhat sufficient | 1 (4%) | 2 (7%) | 1 (4%) | 1 (3%) | 1 (6%) |
| Sufficient | 1 (4%) | 1 (3%) | 3 (11%) | 1 (3%) | 3 (17%) |
| Don't know / Can't remember | 0 (0%) | 2 (7%) | 0 (0%) | 1 (3%) | 0 (0%) |
| Not applicable – don't teach this subject | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 26* | 30 | 28* | 29* | 18* |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 18-30. *Small sample size.

## Thinking again about the last 12 months since February 2024. Was the amount of time that you undertook role-specific professional development…?

| | % |
|---|---|
| Insufficient | 18 (53%) |
| Somewhat insufficient | 7 (21%) |
| Neither sufficient nor insufficient | 1 (3%) |
| Somewhat sufficient | 2 (6%) |
| Sufficient | 4 (12%) |
| Don’t know / Can’t remember | 2 (6%) |
| Column n | 34 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 34

## Which of the following barriers apply to your own experience of accessing subject specific professional development?

| | % |
|---|---|
| Lack of funding for cover teachers | 29 (76%) |
| Lack of available cover teachers | 20 (53%) |
| Course cost & expenses to attend courses | 27 (71%) |
| School policy restricts the type of courses I can attend | 12 (32%) |
| Having to attend PD courses/training in my own time | 22 (58%) |
| Availability of courses | 15 (39%) |
| Lack of knowledge about opportunities | 11 (29%) |
| Not having access to the required technology/software/learning platforms, etc. | 3 (8%) |
| Prohibitive travel time / distance | 16 (42%) |
| Other | 2 (5%) |
| There are no barriers | 0 (0%) |
| Column n | 38 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 38

## Which of the following barriers apply to your own experience of accessing role-specific professional development?

| | % |
|---|---|
| Lack of funding for cover staff | 8 (24%) |
| Lack of available cover staff | 10 (29%) |
| Course cost & expenses to attend courses | 28 (82%) |
| School policy restricts the type of courses I can attend | 5 (15%) |
| Having to attend PD courses/training in my own time | 2 (6%) |
| Availability of courses | 22 (65%) |
| Lack of knowledge about opportunities | 9 (26%) |
| Not having access to the required technology/software/learning platforms, etc. | 4 (12%) |
| Prohibitive travel time / distance | 24 (71%) |
| There are no barriers | 0 (0%) |
| Column n | 34 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 34

## Why is subject-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 24 (65%) |
| It helps me to develop my expertise in areas I haven't taught before | 16 (43%) |
| It gives me new ideas to improve my teaching based on the latest education research | 33 (89%) |
| It increases my confidence in using practical activities in my lessons | 13 (35%) |
| It helps me to develop teaching approaches to meet specific learner needs | 19 (51%) |
| It helps me contextualise the curriculum | 19 (51%) |
| It allows me to share ideas and learn from other teachers outside of my classroom | 24 (65%) |
| It increases my enthusiasm for my subject | 20 (54%) |
| Other, please elaborate | 1 (3%) |
| It's not important to me | 0 (0%) |
| Column n | 37 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 37

## Why is role-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 28 (82%) |
| It helps me to develop my expertise in health and safety and prep room management | 27 (79%) |
| It gives me new ideas to improve practical activities | 29 (85%) |
| It increases my confidence in my role | 24 (71%) |
| It gives me a deeper knowledge of how practical activities can be used to support the delivery of the curriculum | 23 (68%) |
| It allows me to share ideas and learn from other technicians outside of my school | 21 (62%) |
| It increases my enthusiasm for my job | 26 (76%) |
| Other, please elaborate | 3 (9%) |
| Column n | 34 |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 34

## Aside from statutory PD e.g. safeguarding, what are your school's priorities for CPD?

| | % |
|---|---|
| Developing the leadership talent pipeline | 7 (10%) |
| Developing leadership skills of those in post | 9 (13%) |
| Improving teacher subject expertise | 4 (6%) |
| Prioritising whole school PD based on the school improvement plan | 31 (44%) |
| Developing teaching approaches to meet specific learner needs | 16 (23%) |
| Contextualising subjects | 2 (3%) |
| Other, please elaborate | 6 (8%) |
| Don't know | 30 (42%) |
| Column n | 71 |

Filter: State funded secondary schools; Unweighted; base n = 71

## Section F

# Vocational pathways

## Summary

Welsh teachers lack confidence in providing information on technical and vocational routes into scientific careers, with only 43% of respondents feeling somewhat or very confident to do so.

We asked teachers about their awareness of and advocacy for different academic and vocational science pathways. There are lower levels of awareness of apprenticeship routes in Wales compared to other comparable nations. For example, there are far lower levels of advocacy for degree apprenticeships compared to England (30% of teachers in Wales are aware of and advocate for this route, compared to 60% in England). The highest levels of teacher advocacy are for traditional academic routes in the sciences (A levels, undergraduate degrees).

## How confident do you feel about the following areas?

| | Linking the curriculum to real-life contexts | Linking the curriculum to scientific careers | Providing information on academic routes into scientific careers | Providing information on technical/vocational routes into scientific careers |
|---|---|---|---|---|
| Very unconfident | 3 (8%) | 2 (5%) | 2 (5%) | 4 (11%) |
| Somewhat unconfident | 1 (3%) | 3 (8%) | 5 (14%) | 11 (30%) |
| Neither confident nor unconfident | 4 (11%) | 5 (14%) | 4 (11%) | 6 (16%) |
| Somewhat confident | 19 (51%) | 19 (51%) | 18 (49%) | 14 (38%) |
| Very confident | 10 (27%) | 8 (22%) | 8 (22%) | 2 (5%) |
| Don’t know / Not sure | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Not applicable / Don’t include in my teaching | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 37 | 37 | 37 | 37 |

Filter: Teachers only + not selected ‘Not applicable’ + State funded secondary schools; Unweighted; base n = 37

## For each of the following academic and vocational science pathways, please tell us which you are aware of and advocate to your students.

| | A levels | BTEC Nationals | BTEC Apprenticeships | Foundation Apprenticeship |
|---|---|---|---|---|
| Not aware | 0 (0%) | 6 (16%) | 14 (38%) | 14 (38%) |
| Aware but don't advocate | 3 (8%) | 16 (43%) | 9 (24%) | 9 (24%) |
| Aware and advocate to my students | 33 (89%) | 10 (27%) | 7 (19%) | 7 (19%) |
| Don't know / Not sure | 1 (3%) | 5 (14%) | 7 (19%) | 7 (19%) |
| Column n | 37 | 37 | 37 | 37 |

| | Apprenticeship | Higher Apprenticeship | Degree Apprenticeship | Foundation degree | Undergraduate degree |
|---|---|---|---|---|---|
| Not aware | 5 (14%) | 12 (32%) | 12 (32%) | 6 (16%) | 1 (3%) |
| Aware but don't advocate | 7 (19%) | 13 (35%) | 9 (24%) | 13 (35%) | 5 (14%) |
| Aware and advocate to my students | 21 (57%) | 7 (19%) | 11 (30%) | 14 (38%) | 30 (81%) |
| Don't know / Not sure | 4 (11%) | 5 (14%) | 5 (14%) | 4 (11%) | 1 (3%) |
| Column n | 37 | 37 | 37 | 37 | 37 |

Filter: Teachers, Wales only + State funded secondary schools; Unweighted; base n = 37

## What are the barriers, if any, that prevent you from advocating for vocational pathways to your students?

| | % |
|---|---|
| Lack of detailed knowledge about the pathways | 2 (50%) |
| Lack of funding | 0 (0%) |
| Lack of local availability of courses | 0 (0%) |
| Lack of local availability of placements | 0 (0%) |
| School is focused on academic pathways | 0 (0%) |
| Don't know / Not sure | 1 (25%) |
| Other | 1 (25%) |
| There are no barriers | 0 (0%) |
| Column n | 4* |

Filter: Teachers, Not advocated to any vocational pathways only + State funded secondary schools; Unweighted; base n = 4. *Small sample size.

## What are the barriers for you working with external organisations to deliver outreach activities to your students?

| | % |
|---|---|
| Limited time | 32 (89%) |
| Funding | 22 (61%) |
| Student behaviour | 7 (19%) |
| Lack of support and encouragement from senior leaders | 7 (19%) |
| Lack of interest / engagement from local organisations, companies etc | 8 (22%) |
| Safeguarding concerns | 1 (3%) |
| Lack of awareness of opportunities | 15 (42%) |
| I don't see the benefits for students | 1 (3%) |
| Lack of my time to organise | 26 (72%) |
| Lack of time within the school day to enable this | 24 (67%) |
| Other priorities/pressures (eg Ofsted) | 7 (19%) |
| Lack of interest / engagement from local organisations, companies etc | 0 (0%) |
| Column n | 36 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 36

## Section G

# Digital technology

### Summary

Teachers across the nations appear to have comparable levels of access to digital technology.

80% of teachers in Wales agree or strongly agree that they can use digital technology when needed and 53% agree or strongly agree that they are confident in using digital tools.

29% of teachers never use digital tools in their science lessons. Use of digital tools and teacher confidence in doing so is lower for teachers in Wales compared to the other nations.

## Have you ever used AI within your role?

| | % |
|---|---|
| Yes | 31 (44%) |
| No | 39 (56%) |
| Column n | 70 |

Filter: State funded secondary schools; Unweighted; base n = 70

## Which of the following AI-powered tools or technologies (if any) have you used or experimented with in your teaching practice?

| | % |
|---|---|
| Grammarly | 9 (29%) |
| magic.ai | 0 (0%) |
| Teachermatic | 0 (0%) |
| Teachmateai | 4 (13%) |
| Riffbot | 0 (0%) |
| Revisely | 0 (0%) |
| Copilot | 7 (23%) |
| ChatGPT | 29 (94%) |
| DALL-E 3 | 3 (10%) |
| Oak Aila lesson planning tool | 3 (10%) |
| Google Bard | 3 (10%) |
| Other, please provide | 9 (29%) |
| Column n | 31 |

Filter: Have used AI + State funded secondary schools; Unweighted; base n = 31

## To what extent do you agree with the following statement?I am able to use digital technology (e.g. computer room / tablets / laptops / WiFi) when needed.

| | % |
|---|---|
| Strongly agree | 30 (43%) |
| Agree | 26 (37%) |
| Neither agree nor disagree | 8 (11%) |
| Disagree | 4 (6%) |
| Strongly disagree | 1 (1%) |
| Don't know / Not sure | 1 (1%) |
| Column n | 70 |

Filter: State funded secondary schools; Unweighted; base n = 70

## How often does your department use digital tools in your lessons, e.g. light gates, digital microscopes?

| | % |
|---|---|
| Every week | 8 (11%) |
| Once a topic (where relevant) | 20 (29%) |
| Once a term | 19 (27%) |
| Never | 20 (29%) |
| Don't know / Not sure | 3 (4%) |
| Column n | 70 |

Filter: State funded secondary schools; Unweighted; base n = 70

## To what extent do you agree with the following statement? I am confident in using digital tools in my teaching.

| | % |
|---|---|
| Strongly agree | 10 (28%) |
| Agree | 9 (25%) |
| Neither agree nor disagree | 6 (17%) |
| Disagree | 7 (19%) |
| Strongly disagree | 2 (6%) |
| Don't know / Not sure | 1 (3%) |
| Column n | 36 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 36

## Section H

# Additional support and resources

### Summary

47% of teachers somewhat or strongly agree that students with SEND/ALN have access to the support and resources needed to engage in science lessons comparably with their peers. Similarly, 44% of teachers somewhat or strongly agree that students with SEND/ALN have access to support and resources needed to participate in all practical activities in science lessons.

81% of respondents felt that more teaching assistant support would improve the equitable experience of students with SEND/ALN in science lessons.

## How far do you agree with the following statements?

| | Students with SEND/ALN have access to any additional support/resources needed to engage in science lessons comparably to their peers | Students with SEND/ALN have access to any additional support/ resources needed to participate in all practical activities in science lessons |
|---|---|---|
| Strongly agree | 1 (3%) | 4 (11%) |
| Somewhat agree | 16 (44%) | 12 (33%) |
| Neither agree nor disagree | 10 (28%) | 9 (25%) |
| Somewhat disagree | 4 (11%) | 6 (17%) |
| Strongly disagree | 3 (8%) | 2 (6%) |
| Don't know / Not sure | 2 (6%) | 3 (8%) |
| Column n | 36 | 36 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 36

## For your school/department, what would improve the equitable experience of students with SEND/ALN in science lessons?

| | % |
|---|---|
| More teaching assistant support | 57 (81%) |
| Specialist practical equipment (materials, ear defenders, quiet classroom areas etc) | 30 (43%) |
| More training on specific strategies for SEND/ALN students | 31 (44%) |
| Teaching resources that are accessible for SEND/ALN learners | 35 (50%) |
| Specialist technology | 16 (23%) |
| Other | 9 (13%) |
| Column n | 70 |

Filter: State funded secondary schools; Unweighted; base n = 70

## Section A

# About your school

## Summary

Respondents **in Northern Ireland** reported the lowest levels of teaching assistant understaffing compared to the rest of the UK and ROI, with only 29% of staff feeling their current provision is not sufficient for their school. However, respondents in Northern Ireland also report the highest levels of chemistry teacher understaffing among all nations at 48%.

Equivalent data is available for Wales, England, Scotland and Republic of Ireland.

## Which of the following best describes your current job role?

| | % |
|---|---|
| Head of department/principal teacher – Science | 13 (21%) |
| Head of department/principal teacher – Chemistry | 3 (5%) |
| Head of department/principal teacher – Physics | 2 (3%) |
| Head of department/principal teacher – Biology | 3 (5%) |
| Classroom teacher of science, biology, chemistry and/or physics | 24 (38%) |
| FE lecturer of science, biology, chemistry and/or physics | 0 (0%) |
| Science technician | 16 (25%) |
| Trainee / student science teacher | 0 (0%) |
| Other staff member with science teaching responsibilities, e.g. SLT | 2 (3%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## Which of the following best describes the school where you work?

| | % |
|---|---|
| Local authority, Community, Foundation, or ETB | 29 (46%) |
| Academy (standalone) | 0 (0%) |
| Academy (in a multi-academy trust) | 0 (0%) |
| Grammar school/selective school (any type of state school with selective admissions) | 34 (54%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## Please describe the staffing at your school or college in each of the following areas. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | Biology teachers | Chemistry teachers | Physics teachers | Science technicians | Teaching assistants |
|---|---|---|---|---|---|
| Overstaffed | 4 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (8%) |
| Adequately staffed | 50 (79%) | 32 (51%) | 32 (51%) | 37 (59%) | 20 (42%) |
| Understaffed | 8 (13%) | 30 (48%) | 31 (49%) | 26 (41%) | 14 (29%) |
| Don't know / Not sure | 1 (2%) | 1 (2%) | 0 (0%) | 0 (0%) | 10 (21%) |
| Column n | 63 | 63 | 63 | 63 | 48 |

Filter: Not select 'Not applicable' + State funded secondary schools; Unweighted; base n = 48-63

## Which of the following are significantly impacted as a result of understaffing of biology, chemistry, and/or physics teachers?

| | % |
|---|---|
| Learning | **26 (67%)** |
| Behaviour | **11 (28%)** |
| Student motivation | **16 (41%)** |
| GCSE subject choices | **19 (49%)** |
| HE progression routes | **8 (21%)** |
| Other | **7 (18%)** |
| Column n | **39** |

Filter: Selected ‘Understaffed’ only + State funded secondary schools; Unweighted; base n = 39

## Section B

# About your role

### Summary

Technicians broadly report good levels of confidence in supporting the three sciences across the three key stages. Teachers similarly feel confident in teaching the three sciences, with confidence dropping at key stage 5 (for chemistry, the number of teachers feeling somewhat or very confident in teaching KS4 is 83%, but for KS5 this drops to 71%).

Job satisfaction is slightly higher for technicians than for teachers in Northern Ireland, as is wellbeing. Job satisfaction for staff is highest here compared to the other nations.

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

| | % |
|---|---|
| Biology | 16 (34%) |
| Chemistry | 22 (47%) |
| Physics | 14 (30%) |
| General Science | 10 (21%) |
| None of the above | 1 (2%) |
| Don't know / Not sure | 0 (0%) |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

## Including the current academic year, how many years have you been teaching the sciences? Please do not include your training year.

| | % |
|---|---|
| 1-2 YRS | 3 (6%) |
| 3-4 YRS | 1 (2%) |
| 5-9 YRS | 4 (9%) |
| 10+ YRS | 94 (83%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

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

| | % |
|---|---|
| 1-2 YRS | 0 (0%) |
| 3-4 YRS | 1 (6%) |
| 5-9 YRS | 3 (19%) |
| 10+ YRS | 12 (75%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 16* |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## For each of the key stages, how confident are you in supporting biology, chemistry and/or physics? If you don't support the particular subject content at a key stage, select 'Do not support'.

| | 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 unconfident | 2 (14%) | 2 (14%) | 2 (17%) | 2 (14%) | 2 (14%) | 1 (8%) | 2 (13%) | 3 (20%) | 2 (15%) |
| Somewhat unconfident | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (8%) | 0 (0%) | 0 (0%) | 1 (8%) |
| Neither confident nor un-confident | 0 (0%) | 0 (0%) | 2 (17%) | 0 (0%) | 0 (0%) | 1 (8%) | 0 (0%) | 0 (0%) | 3 (23%) |
| Somewhat confident | 1 (7%) | 2 (14%) | 4 (33%) | 1 (7%) | 2 (14%) | 4 (33%) | 4 (27%) | 4 (27%) | 5 (38%) |
| Very confident | 11 (79%) | 10 (71%) | 4 (33%) | 11 (79%) | 10 (71%) | 5 (42%) | 9 (60%) | 8 (53%) | 2 (15%) |
| Column n | 14* | 14* | 12* | 14* | 14* | 12* | 15* | 15* | 13* |

Filter: Technician, Northern Ireland only + not selected 'Do not support' + State funded secondary schools; Unweighted; base n = 12-15. *Small sample size.

## For each of the levels that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these levels? If you don't teach the particular subject content to a level, either as a single subject or as part of a combined science course, select 'Do not teach'.

| | 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 unconfident | 4 (9%) | 3 (9%) | 6 (26%) | 3 (7%) | 2 (5%) | 0 (0%) | 0 (0%) | 0 (0%) | 4 (19%) |
| Somewhat unconfident | 1 (2%) | 3 (9%) | 3 (13%) | 2 (4%) | 4 (10%) | 6 (22%) | 5 (11%) | 4 (13%) | 3 (14%) |
| Neither confident nor un-confident | 1 (2%) | 0 (0%) | 4 (17%) | 1 (2%) | 1 (3%) | 2 (7%) | 3 (7%) | 3 (9%) | 1 (5%) |
| Somewhat confident | 6 (14%) | 11 (32%) | 1 (4%) | 5 (11%) | 8 (21%) | 5 (19%) | 5 (11%) | 7 (22%) | 2 (10%) |
| Very confident | 32 (73%) | 17 (50%) | 9 (39%) | 35 (76%) | 24 (62%) | 14 (52%) | 31 (70%) | 18 (56%) | 11 (52%) |
| Do not teach | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 44 | 34 | 23* | 46 | 39 | 27* | 44 | 32 | 21* |

Filter: Teacher, Northern Ireland only + not selected 'Do not teach' + State funded secondary schools; Unweighted; base n = 21-46. *Small sample size.

## 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?

| | % |
|---|---|
| Mean | 6.6 |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

## 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?

| | % |
|---|---|
| Mean | 7.3 |
| Column n | 16* |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## The next question is about your mental well-being and will help us to better understand the well-being of teachers and technicians working in education. This question is optional and can be skipped by pressing [next].

### *Teachers*

| | % |
|---|---|
| High wellbeing (28 or greater) | 4 (9%) |
| Moderate wellbeing (20 - 27) | 30 (65%) |
| Low wellbeing (Less than 20) | 12 (26%) |
| Average (Mean) | 22.0 |
| Column n | 46 |

Filter: Teachers + State funded secondary schools; Unweighted; base n = 46

### *Technicians*

| | % |
|---|---|
| High wellbeing (28 or greater) | 4 (25%) |
| Moderate wellbeing (20 - 27) | 10 (63%) |
| Low wellbeing (Less than 20) | 2 (13%) |
| Average (Mean) | 24.0 |
| Column n | 16* |

Filter: Technicians + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## Section C

# Retention

### Summary

When asked how long they intend to stay in their current school, 13% of teacher respondents and 0% of technicians in Northern Ireland selected only to the end of the current academic year.

The reasons given for leaving are available below, but sample size is too small for comment.

## How long do you intend to stay at your current school?

### *Teachers*

| | % |
|---|---|
| Up to the end of the current academic year | **6 (13%)** |
| Up to the end of the 25/26 academic year | **2 (4%)** |
| Up to the end of the 26/27 academic year | **2 (4%)** |
| Into the 27/28 academic year or beyond | **25 (53%)** |
| Don't know / Not sure | **11 (23%)** |
| Prefer not to say | **1 (2%)** |
| Column n | **47** |

Filter Teachers + State funded secondary schools; Unweighted; base n = 47

## How long do you intend to stay at your current school?

### *Technicians*

| | % |
|---|---|
| Up to the end of the current academic year | **0 (0%)** |
| Up to the end of the 25/26 academic year | **2 (13%)** |
| Up to the end of the 26/27 academic year | **2 (13%)** |
| Into the 27/28 academic year or beyond | **10 (63%)** |
| Don't know / Not sure | **2 (13%)** |
| Prefer not to say | **0 (0%)** |
| Column n | **16*** |

Filter Technicians + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## What are you planning to do after leaving your current school? If you have more than one plan, please select the one that is most likely.

### *Teachers*

| | % |
|---|---|
| Retirement | 5 (50%) |
| Move to a similar role at a different state school | 4 (40%) |
| Move to a different state school for promotion | 0 (0%) |
| Move to a similar role at a private/independent school | 0 (0%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into teaching at higher education | 0 (0%) |
| Move into another role in education (not teaching) | 0 (0%) |
| I want to do something outside of education / career change | 0 (0%) |
| Have a career break | 0 (0%) |
| Other | 0 (0%) |
| Don't know / Not sure | 1 (10%) |
| Column n | 10* |

Filter Teachers + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 10.
*Small sample size.

## What are you planning to do after leaving your current school? If you have more than one plan, please select the one that is most likely.

### *Technicians*

| | % |
|---|---|
| Retirement | 1 (25%) |
| Move to a similar role at a different state school | 0 (0%) |
| Move to a different state school for promotion | 0 (0%) |
| Move to a similar role at a private/independent school | 0 (0%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into another role in education | 1 (25%) |
| Move to a technician role in HE | 0 (0%) |
| Move to a technician role in FE | 0 (0%) |
| Start training to be a teacher | 0 (0%) |
| I want to do something outside of education / career change | 0 (0%) |
| Other | 0 (0%) |
| Don't know / Not sure | 2 (50%) |
| Column n | 4* |

Filter Technicians + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 4.
*Small sample size.

## What are your reasons for leaving your current school?

### *Teachers*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 3 (60%) |
| High levels of stress / exhaustion | 3 (60%) |
| Having to teach outside specialism | 3 (60%) |
| Low pay | 1 (20%) |
| Lack of progression opportunities | 1 (20%) |
| Lack of respect / don't feel appreciated | 1 (20%) |
| Lack of recognition | 1 (20%) |
| Poor student behaviour | 2 (40%) |
| Issues with management | 1 (20%) |
| Want to try something different | 1 (20%) |
| Other | 2 (40%) |
| Don't know / not sure | 0 (0%) |
| Column n | 5* |

Filter Teachers + not retiring + State funded secondary schools; Unweighted; base n = 5. *Small sample size.

## What are your reasons for leaving your current school?

### *Technicians*

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 0 (0%) |
| High levels of stress / exhaustion | 1 (33%) |
| Lack of full-time contract (e.g. term time only) | 1 (33%) |
| Low pay | 3 (100%) |
| Lack of progression opportunities | 3 (100%) |
| Lack of job security (e.g. temporary contracts) | 0 (0%) |
| Lack of respect / don't feel appreciated | 2 (67%) |
| Lack of recognition | 2 (67%) |
| Having to perform tasks outside my role | 1 (33%) |
| Poor student behaviour | 1 (33%) |
| Issues with management | 1 (33%) |
| Want to try something different | 0 (0%) |
| Other | 0 (0%) |
| Don't know / not sure | 0 (0%) |
| Column n | 3* |

Filter Technicians + not retiring + State funded secondary schools; Unweighted; base n = 3. *Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a teacher at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Teachers*

| | % |
|---|---|
| More balanced / reduced workload | 1 (100%) |
| Better work/life balance | 0 (0%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 0 (0%) |
| Increased pay | 1 (100%) |
| Only expected to teach content you consider yourself a specialist in | 0 (0%) |
| More opportunity for progression | 0 (0%) |
| More respect / appreciation | 0 (0%) |
| More recognition of work performance | 1 (100%) |
| More support with student behaviour | 0 (0%) |
| Less emphasis on exam results | 0 (0%) |
| Less pressure regarding assessed school performance and inspections | 0 (0%) |
| More support from parents | 0 (0%) |
| More support from senior management team | 0 (0%) |
| Increase funding for classroom/school resources | 1 (100%) |
| Timetabled / regular professional development | 1 (100%) |
| Being able to find a position in a different school | 0 (0%) |
| Other | 0 (0%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 1* |

Filter Teachers + moving out of Secondary teaching + State funded secondary schools; Unweighted; base n = 1.
*Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a technician at secondary school? Please select up to 5 factors from the following list that would be most influential.

### *Technicians*

| | % |
|---|---|
| More balanced / reduced workload | 0 (0%) |
| Better work/life balance | 1 (33%) |
| Better job security | 0 (0%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 3 (100%) |
| Increased pay | 3 (100%) |
| More opportunity for progression | 3 (100%) |
| More respect / appreciation | 2 (67%) |
| More recognition of work performance | 3 (100%) |
| More support with student behaviour | 1 (33%) |
| More support from senior management team | 1 (33%) |
| Increase funding for classroom/school resources | 2 (67%) |
| Timetabled / regular professional development | 1 (33%) |
| Being able to find a position in a different school | 0 (0%) |
| Other | 1 (33%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 3* |

Filter Technicians + moving out of Secondary education + State funded secondary schools; Unweighted; base n = 3. *Small sample size.

## Section D

# Challenges & barriers

### Summary

Teachers reported several challenges at classroom level. Not enough time outside of the classroom was the most cited challenge (81%), followed by not enough classroom time to cover the curriculum content (79%) and student attendance (57%). Limited numeracy and literacy skills of students were notably lesser challenges compared to all other nations.

Insufficient staff non-contact time was the largest challenge identified at school level (59%), which is high compared to the other nations. As reported in our headlines, funding is also a key challenge at school level.

Respondents identified similar themes when considering barriers to running practical work in their schools. Insufficient time for practical work to be taught alongside theory (57%) was the highest cited barrier. Challenging student behaviour (33%) was less of a barrier compared to Scotland (50%) and Wales (58%).

## Which of the following present challenges to your classroom teaching in science?

| | % |
|---|---|
| Limited numeracy skills of students | 16 (34%) |
| Limited literacy skills of students | 14 (30%) |
| Insufficient classroom support, e.g. no teaching assistants | 4 (9%) |
| Student attendance | 27 (57%) |
| Challenging student behaviour | 25 (53%) |
| Inadequate teaching resources (lesson plans / scheme of work) | 4 (9%) |
| No technician/not enough technicians | 15 (32%) |
| Teaching outside of specialism | 8 (17%) |
| Lack of confidence in the subject area | 2 (4%) |
| Insufficient lab access | 6 (13%) |
| Insufficient classroom equipment | 12 (26%) |
| Not enough classroom time to cover the curriculum content | 37 (79%) |
| Not enough time outside of classroom (for planning/marking and/or assessment) | 38 (81%) |
| Other | 7 (15%) |
| There are no challenges | 0 (0%) |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

## What challenges does your school face?

| | % |
|---|---|
| Insufficient funding | 33 (52%) |
| High staff turnover | 8 (13%) |
| Insufficient staff non-contact time | 37 (59%) |
| Lack of support to students from parent/family/guardian | 18 (29%) |
| Poor pupil attendance | 19 (30%) |
| Understaffing of teaching staff | 23 (37%) |
| Understaffing of classroom support staff | 12 (19%) |
| High staff absence | 10 (16%) |
| Insufficient support from leadership | 19 (30%) |
| Negative working environment | 17 (27%) |
| Lack of collaboration/teamwork amongst staff | 13 (21%) |
| Not enough support for inexperienced teachers | 15 (24%) |
| Other | 3 (5%) |
| There are no challenges | 3 (5%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## What support do you need to address these challenges, either in the classroom and/or across the school?

| | % |
|---|---|
| Consistent policies including behaviour management, attendance and learning and teaching | 29 (46%) |
| More funding | 37 (59%) |
| More non-contact time (for planning, PD, practising practical work) | 45 (71%) |
| More classroom support staff | 8 (13%) |
| Support from leadership | 27 (43%) |
| Greater access to subject specific professional development | 18 (29%) |
| Greater collaboration with colleagues | 22 (35%) |
| Protected non-contact time | 43 (68%) |
| Leadership led cultural shift | 22 (35%) |
| Other | 8 (13%) |
| Don't require support | 1 (2%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## Thinking about the last 12 months, with each of your KS3/ Third Level / Junior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 23 (50%) | 16 (35%) | 12 (26%) |
| At least once a fortnight | 17 (37%) | 19 (41%) | 6 (13%) |
| At least once a month | 6 (13%) | 7 (15%) | 8 (17%) |
| Once every couple of months | 0 (0%) | 1 (2%) | 11 (24%) |
| Less often | 0 (0%) | 3 (7%) | 6 (13%) |
| Never | 0 (0%) | 0 (0%) | 3 (7%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 46 | 46 | 46 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 46

## Thinking about the last 12 months, with each of your GCSE / National 5/ Transition Year classes, how often did you generally do the following in science lessons

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 9 (20%) | 4 (9%) | 7 (16%) |
| At least once a fortnight | 18 (40%) | 17 (38%) | 11 (24%) |
| At least once a month | 15 (33%) | 15 (33%) | 5 (11%) |
| Once every couple of months | 1 (2%) | 7 (16%) | 12 (27%) |
| Less often | 2 (4%) | 2 (4%) | 8 (18%) |
| Never | 0 (0%) | 0 (0%) | 2 (4%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 45 | 45 | 45 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 45

## Thinking about the last 12 months, with each of your A-Level / Higher/ Senior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 13 (34%) | 4 (11%) | 4 (11%) |
| At least once a fortnight | 11 (29%) | 11 (29%) | 5 (13%) |
| At least once a month | 8 (21%) | 10 (26%) | 6 (16%) |
| Once every couple of months | 4 (11%) | 3 (8%) | 8 (21%) |
| Less often | 2 (5%) | 10 (26%) | 13 (34%) |
| Never | 0 (0%) | 0 (0%) | 2 (5%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 38 | 38 | 38 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 38

## What are the barriers you face to running practical work in your school?

| | % |
|---|---|
| Understaffing of science technicians | 19 (30%) |
| Insufficient time for practical to be taught alongside theory | 36 (57%) |
| Lack of equipment | 18 (29%) |
| No time for training/practicing | 16 (25%) |
| Health and safety concerns | 16 (25%) |
| Challenging student behaviour | 21 (33%) |
| Cost of consumables and chemicals | 21 (33%) |
| Lack of confidence in delivering practical sessions | 5 (8%) |
| Insufficient lab access | 8 (13%) |
| Unsuitable labs | 12 (19%) |
| Other | 4 (6%) |
| No barriers | 3 (5%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## Section E

# Professional development

## Summary

Over the period of February 2024 to February 2025, 50% of those teaching chemistry did not access any subject specific professional development (compared to 59% of those teaching biology and 54% of those teaching physics). 31% of science technicians did not access any role-specific professional development in the same time period. This level of access is comparable to England.

57% of those teaching chemistry felt the amount of time they undertook subject-specific professional development was insufficient, or somewhat insufficient. Teachers reported that a lack of funding for cover teachers (62%), a lack of available cover teachers (62%) and the availability of courses (60%) were the biggest barriers to accessing subject-specific PD.

## Thinking about the last 12 months (since February 2024), please select the number of hours of subject specific professional development that you received for each of the following subjects:If you didn't teach this subject in the last 12 months, please select 'Not applicable - don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| 0 hrs - Didn't access any professional development | 19 (59%) | 20 (50%) | 15 (54%) | 19 (61%) | 8 (36%) |
| Up to 5 hours | 4 (13%) | 7 (18%) | 5 (18%) | 5 (16%) | 3 (14%) |
| 5 - 9 hours | 2 (6%) | 1 (3%) | 0 (0%) | 0 (0%) | 2 (9%) |
| 10 – 14 hours | 1 (3%) | 2 (5%) | 1 (4%) | 1 (3%) | 5 (23%) |
| 15 – 19 hours | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| 20 - 24 hours | 1 (3%) | 1 (3%) | 0 (0%) | 1 (3%) | 0 (0%) |
| 25 - 29 hours | 0 (0%) | 0 (0%) | 0 (0%) | 1 (3%) | 0 (0%) |
| 30 - 34 hours | 0 (0%) | 0 (0%) | 0 (0%) | 1 (3%) | 0 (0%) |
| 35+ hours | 0 (0%) | 1 (3%) | 1 (4%) | 0 (0%) | 1 (5%) |
| Don't know | 5 (16%) | 8 (20%) | 6 (21%) | 3 (10%) | 3 (14%) |
| Column n | 32 | 40 | 28* | 31 | 22* |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 22-40. *Small sample size.

## Thinking about the last 12 months (since February 2024), please select the number of hours of role-specific professional development that you received:

| SSPD | % |
|---|---|
| 0 hrs - Didn't access any professional development | 5 (31%) |
| Up to 5 hours | 5 (31%) |
| 5 - 9 hours | 3 (19%) |
| 10 – 14 hours | 1 (6%) |
| 15 – 19 hours | 0 (0%) |
| 20 - 24 hours | 1 (6%) |
| 25 - 29 hours | 0 (0%) |
| 30 - 34 hours | 0 (0%) |
| 35+ hours | 0 (0%) |
| Don't know | 1 (6%) |
| Column n | 16* |

Filter: Technicians only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## Thinking again about the last 12 months (since February 2024). Was the amount of time that you undertook subject specific professional development for each subject…? If you didn't teach this subject in the last academic year, please select 'Not applicable – don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| Insufficient | 13 (39%) | 17 (40%) | 10 (33%) | 16 (46%) | 9 (35%) |
| Somewhat insufficient | 4 (12%) | 7 (17%) | 4 (13%) | 4 (11%) | 3 (12%) |
| Neither sufficient nor insufficient | 10 (30%) | 10 (24%) | 11 (37%) | 10 (29%) | 2 (8%) |
| Somewhat sufficient | 2 (6%) | 6 (14%) | 4 (13%) | 3 (9%) | 4 (15%) |
| Sufficient | 2 (6%) | 2 (5%) | 0 (0%) | 2 (6%) | 4 (15%) |
| Don't know / Can't remember | 2 (6%) | 0 (0%) | 1 (3%) | 0 (0%) | 4 (15%) |
| Not applicable – don't teach this subject | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 33 | 42 | 30 | 35 | 26* |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 26-42. *Small sample size.

## Thinking again about the last 12 months since February 2024. Was the amount of time that you undertook role-specific professional development…?

| | % |
|---|---|
| Insufficient | 6 (38%) |
| Somewhat insufficient | 2 (13%) |
| Neither sufficient nor insufficient | 3 (19%) |
| Somewhat sufficient | 1 (6%) |
| Sufficient | 4 (25%) |
| Don’t know / Can’t remember | 0 (0%) |
| Column n | 16* |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## Which of the following barriers apply to your own experience of accessing subject specific professional development?

| | % |
|---|---|
| Lack of funding for cover teachers | 29 (62%) |
| Lack of available cover teachers | 29 (62%) |
| Course cost & expenses to attend courses | 27 (57%) |
| School policy restricts the type of courses I can attend | 5 (11%) |
| Having to attend PD courses/training in my own time | 26 (55%) |
| Availability of courses | 28 (60%) |
| Lack of knowledge about opportunities | 23 (49%) |
| Not having access to the required technology/software/learning platforms, etc. | 4 (9%) |
| Prohibitive travel time / distance | 19 (40%) |
| Other | 5 (11%) |
| There are no barriers | 0 (0%) |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

## Which of the following barriers apply to your own experience of accessing role-specific professional development?

| | % |
|---|---|
| Lack of funding for cover staff | 1 (6%) |
| Lack of available cover staff | 1 (6%) |
| Course cost & expenses to attend courses | 8 (50%) |
| School policy restricts the type of courses I can attend | 1 (6%) |
| Having to attend PD courses/training in my own time | 1 (6%) |
| Availability of courses | 12 (75%) |
| Lack of knowledge about opportunities | 5 (31%) |
| Not having access to the required technology/software/learning platforms, etc. | 2 (13%) |
| Prohibitive travel time / distance | 7 (44%) |
| There are no barriers | 2 (13%) |
| Column n | 16* |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## Why is subject-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 36 (77%) |
| It helps me to develop my expertise in areas I haven't taught before | 22 (47%) |
| It gives me new ideas to improve my teaching based on the latest education research | 44 (94%) |
| It increases my confidence in using practical activities in my lessons | 25 (53%) |
| It helps me to develop teaching approaches to meet specific learner needs | 30 (64%) |
| It helps me contextualise the curriculum | 19 (40%) |
| It allows me to share ideas and learn from other teachers outside of my classroom | 32 (68%) |
| It increases my enthusiasm for my subject | 30 (64%) |
| Other, please elaborate | 0 (0%) |
| It's not important to me | 0 (0%) |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

## Why is role-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 12 (75%) |
| It helps me to develop my expertise in health and safety and prep room management | 13 (81%) |
| It gives me new ideas to improve practical activities | 13 (81%) |
| It increases my confidence in my role | 11 (69%) |
| It gives me a deeper knowledge of how practical activities can be used to support the delivery of the curriculum | 10 (63%) |
| It allows me to share ideas and learn from other technicians outside of my school | 12 (75%) |
| It increases my enthusiasm for my job | 7 (44%) |
| Other, please elaborate | 2 (13%) |
| Column n | 16* |

Filter: Technicians only + State funded secondary schools; Unweighted; base n = 16. *Small sample size.

## Aside from statutory PD e.g. safeguarding, what are your school's priorities for CPD?

| | % |
|---|---|
| Developing the leadership talent pipeline | 5 (8%) |
| Developing leadership skills of those in post | 12 (19%) |
| Improving teacher subject expertise | 8 (13%) |
| Prioritising whole school PD based on the school improvement plan | 29 (46%) |
| Developing teaching approaches to meet specific learner needs | 15 (24%) |
| Contextualising subjects | 2 (3%) |
| Other, please elaborate | 4 (6%) |
| Don't know | 22 (35%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## Section F

# Vocational pathways

## Summary

Teachers in Northern Ireland have lower confidence in providing information on both academic and technical/vocational routes into careers compared to the other nations. This confidence is particularly poor when providing information on technical/vocational routes, with only 41% of teachers feeling somewhat or very confident to do so (this is second lowest across the nations, only higher than the ROI).

We asked teachers about their awareness of and advocacy for different academic and vocational science pathways. The strongest levels of advocacy were for traditional academic routes into the sciences (A levels, undergraduate degrees). There were similarly low levels of advocacy for degree apprenticeships as seen in Wales (38% of teachers aware of and advocate for this route in Northern Ireland compared to 30% in Wales; advocacy in both nations significantly below that seen in England, at 60%).

## How confident do you feel about the following areas?

| | Linking the curriculum to real-life contexts | Linking the curriculum to scientific careers | Providing information on academic routes into scientific careers | Providing information on technical/vocational routes into scientific careers |
|---|---|---|---|---|
| Very unconfident | 1 (2%) | 1 (2%) | 1 (2%) | 4 (9%) |
| Somewhat unconfident | 3 (6%) | 3 (6%) | 8 (17%) | 17 (36%) |
| Neither confident nor unconfident | 5 (11%) | 4 (9%) | 8 (17%) | 7 (15%) |
| Somewhat confident | 23 (49%) | 27 (57%) | 20 (43%) | 13 (28%) |
| Very confident | 14 (30%) | 12 (26%) | 10 (21%) | 6 (13%) |
| Don't know / Not sure | 1 (2%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Not applicable / Don't include in my teaching | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 47 | 47 | 47 | 47 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 47

## For each of the following academic and vocational science pathways, please tell us which you are aware of and advocate to your students.

| | A levels | BTEC Nationals | BTEC Apprenticeships | Foundation Apprenticeship |
|---|---|---|---|---|
| Not aware | 1 (2%) | 12 (26%) | 14 (30%) | 20 (43%) |
| Aware but don't advocate | 3 (6%) | 20 (43%) | 19 (40%) | 13 (28%) |
| Aware and advocate to my students | 43 (91%) | 8 (17%) | 4 (9%) | 5 (11%) |
| Don't know / Not sure | 0 (0%) | 7 (15%) | 10 (21%) | 9 (19%) |
| Column n | 47 | 47 | 47 | 47 |

| | Apprenticeship | Higher Apprenticeship | Degree Apprenticeship | Foundation degree | Undergraduate degree |
|---|---|---|---|---|---|
| Not aware | 12 (26%) | 10 (21%) | 8 (17%) | 7 (15%) | 1 (2%) |
| Aware but don't advocate | 13 (28%) | 13 (28%) | 10 (21%) | 17 (36%) | 4 (9%) |
| Aware and advocate to my students | 14 (30%) | 15 (32%) | 18 (38%) | 14 (30%) | 41 (87%) |
| Don't know / Not sure | 8 (17%) | 9 (19%) | 11 (23%) | 9 (19%) | 1 (2%) |
| Column n | 47 | 47 | 47 | 47 | 47 |

Filter: Teachers, Northern Ireland only + State funded secondary schools; Unweighted; base n = 47

## What are the barriers, if any, that prevent you from advocating for vocational pathways to your students?

| | % |
|---|---|
| Lack of detailed knowledge about the pathways | 0 (0%) |
| Lack of funding | 0 (0%) |
| Lack of local availability of courses | 0 (0%) |
| Lack of local availability of placements | 0 (0%) |
| School is focused on academic pathways | 0 (0%) |
| Don't know / Not sure | 0 (0%) |
| Other | 1 (100%) |
| There are no barriers | 0 (0%) |
| Column n | 1* |

Filter: Teachers, Not advocated to any vocational pathways only + State funded secondary schools; Unweighted; base n = 1. *Small sample size.

## What are the barriers for you working with external organisations to deliver outreach activities to your students?

| | % |
|---|---|
| Limited time | 41 (87%) |
| Funding | 26 (55%) |
| Student behaviour | 3 (6%) |
| Lack of support and encouragement from senior leaders | 10 (21%) |
| Lack of interest / engagement from local organisations, companies etc | 8 (17%) |
| Safeguarding concerns | 3 (6%) |
| Lack of awareness of opportunities | 25 (53%) |
| I don't see the benefits for students | 1 (2%) |
| Lack of my time to organise | 32 (68%) |
| Lack of time within the school day to enable this | 33 (70%) |
| Other priorities/pressures (eg Ofsted) | 8 (17%) |
| Lack of interest / engagement from local organisations, companies etc | 1 (2%) |
| Column n | 47 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 47

## Section G

# Digital technology

### Summary

Teachers across the nations appear to have comparable levels of access to digital technology.

84% of teachers in Northern Ireland agree or strongly agree that they can use digital technology when needed and 57% agree or strongly agree that they are confident in using digital tools.

27% of teachers never use digital tools in their science lessons.

## Have you ever used AI within your role?

| | % |
|---|---|
| Yes | 34 (54%) |
| No | 29 (46%) |
| Column n | 63 |

Filter: State funded secondary schools; Unweighted; base n = 63

## Which of the following AI-powered tools or technologies (if any) have you used or experimented with in your teaching practice?

| | % |
|---|---|
| Grammarly | 4 (12%) |
| magic.ai | 1 (3%) |
| Teachermatic | 0 (0%) |
| Teachmateai | 5 (15%) |
| Riffbot | 0 (0%) |
| Revisely | 1 (3%) |
| Copilot | 16 (48%) |
| ChatGPT | 25 (76%) |
| DALL-E 3 | 1 (3%) |
| Oak Aila lesson planning tool | 0 (0%) |
| Google Bard | 1 (3%) |
| Other, please provide | 1 (3%) |
| Column n | 33 |

Filter: Have used AI + State funded secondary schools; Unweighted; base n = 33

## To what extent do you agree with the following statement?I am able to use digital technology (e.g. computer room / tablets / laptops / WiFi) when needed.

| | % |
|---|---|
| Strongly agree | 32 (52%) |
| Agree | 20 (32%) |
| Neither agree nor disagree | 1 (2%) |
| Disagree | 5 (8%) |
| Strongly disagree | 4 (6%) |
| Don't know / Not sure | 0 (0%) |
| Column n | 62 |

Filter: State funded secondary schools; Unweighted; base n = 62

## How often does your department use digital tools in your lessons, e.g. light gates, digital microscopes?

| | % |
|---|---|
| Every week | 4 (6%) |
| Once a topic (where relevant) | 26 (42%) |
| Once a term | 12 (19%) |
| Never | 17 (27%) |
| Don't know / Not sure | 3 (5%) |
| Column n | 62 |

Filter: State funded secondary schools; Unweighted; base n = 62

## To what extent do you agree with the following statement? I am confident in using digital tools in my teaching.

| | % |
|---|---|
| Strongly agree | 15 (33%) |
| Agree | 11 (24%) |
| Neither agree nor disagree | 10 (22%) |
| Disagree | 7 (15%) |
| Strongly disagree | 2 (4%) |
| Don't know / Not sure | 0 (0%) |
| Column n | 46 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 46

## Section H

# Additional support and resources

### Summary

76% of teachers somewhat or strongly agree that students with SEND/ALN have access to the support and resources needed to engage in science lessons comparably with their peers.

Similarly, 80% of teachers somewhat or strongly agree that students with SEND/ALN have access to support and resources needed to participate in all practical activities in science lessons.

This level of support for SEND/ALN students is the highest of all the nations (as seen in section A Northern Ireland also reports the lowest levels of teaching assistant understaffing).

47% of respondents felt that more training on specific strategies for SEND/ALN students would improve the equitable experience of those students in science lessons.

## How far do you agree with the following statements?

| | Students with SEND/ALN have access to any additional support/resources needed to engage in science lessons comparably to their peers | Students with SEND/ALN have access to any additional support/ resources needed to participate in all practical activities in science lessons |
|---|---|---|
| Strongly agree | 14 (30%) | 12 (26%) |
| Somewhat agree | 21 (46%) | 25 (54%) |
| Neither agree nor disagree | 8 (17%) | 6 (13%) |
| Somewhat disagree | 2 (4%) | 2 (4%) |
| Strongly disagree | 1 (2%) | 1 (2%) |
| Don't know / Not sure | 0 (0%) | 0 (0%) |
| Column n | 46 | 46 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 46

## For your school/department, what would improve the equitable experience of students with SEND/ALN in science lessons?

| | % |
|---|---|
| More teaching assistant support | 25 (40%) |
| Specialist practical equipment (materials, ear defenders, quiet classroom areas etc) | 20 (32%) |
| More training on specific strategies for SEND/ALN students | 29 (47%) |
| Teaching resources that are accessible for SEND/ALN learners | 27 (44%) |
| Specialist technology | 10 (16%) |
| Other | 9 (15%) |
| Column n | 62 |

Filter: State funded secondary schools; Unweighted; base n = 62

## Section A

# About your school

### Summary

Respondents **in the Republic of Ireland** reported significantly higher understaffing of science technicians and teaching assistants compared to the nations of the UK. 93% of respondents felt they were understaffed for teaching assistants, and 78% for science technicians.

Equivalent data is available for Wales, Northern Ireland, Scotland and England.

## Which of the following best describes your current job role?

| | % |
|---|---|
| Head of department/principal teacher – Science | 3 (10%) |
| Head of department/principal teacher – Chemistry | 8 (26%) |
| Head of department/principal teacher – Physics | 4 (13%) |
| Head of department/principal teacher – Biology | 2 (6%) |
| Classroom teacher of science, biology, chemistry and/or physics | 14 (45%) |
| FE lecturer of science, biology, chemistry and/or physics | 0 (0%) |
| Science technician | 0 (0%) |
| Trainee / student science teacher | 0 (0%) |
| Other staff member with science teaching responsibilities, e.g. SLT | 0 (0%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## Which of the following best describes the school where you work?

| | % |
|---|---|
| Local authority, Community, Foundation, or ETB | 26 (84%) |
| Academy (standalone) | 0 (0%) |
| Academy (in a multi-academy trust) | 1 (3%) |
| Grammar school/selective school (any type of state school with selective admissions) | 4 (13%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## Please describe the staffing at your school or college in each of the following areas. By understaffed, we mean that you do not feel that the current provision is sufficient for your school.

| | Biology teachers | Chemistry teachers | Physics teachers | Science technicians | Teaching assistants |
|---|---|---|---|---|---|
| Overstaffed | 5 (16%) | 2 (6%) | 2 (6%) | 0 (0%) | 0 (0%) |
| Adequately staffed | 23 (74%) | 20 (65%) | 22 (71%) | 3 (17%) | 0 (0%) |
| Understaffed | 2 (6%) | 9 (29%) | 7 (23%) | 14 (78%) | 13 (93%) |
| Don't know / Not sure | 1 (3%) | 0 (0%) | 0 (0%) | 1 (6%) | 1 (7%) |
| Column n | 31 | 31 | 31 | 18* | 14* |

Filter: Not select 'Not applicable' + State funded secondary schools; Unweighted; base n = 14-31. *Small sample size.

## Which of the following are significantly impacted as a result of understaffing of biology, chemistry, and/or physics teachers?

| | % |
|---|---|
| Learning | **11 (92%)** |
| Behaviour | **6 (50%)** |
| Student motivation | **5 (42%)** |
| GCSE subject choices | **2 (17%)** |
| HE progression routes | **2 (17%)** |
| Other | **0 (0%)** |
| Column n | **12*** |

Filter: Selected ‘Understaffed’ only + State funded secondary schools; Unweighted; base n = 12.
*Small sample size.

## Section B

# About your role

### Summary

Teachers feel varying levels of confidence in teaching the sciences, with confidence lower for Junior Cycle Earth and Space (37% of teachers are very or somewhat unconfident) and Leaving Certificate Chemistry and Physics (43% very or somewhat unconfident).

Job satisfaction for teachers is comparable to those in England and Northern Ireland.

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

| | % |
|---|---|
| Biology | 16 (52%) |
| Chemistry | 20 (65%) |
| Physics | 8 (26%) |
| General Science | 24 (77%) |
| None of the above | 0 (0%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## Including the current academic year, how many years have you been teaching the sciences? Please do not include your training year.

| | % |
|---|---|
| 1-2 YRS | 1 (3%) |
| 3-4 YRS | 5 (16%) |
| 5-9 YRS | 6 (19%) |
| 10+ YRS | 62 (61%) |
| Don't know/Can't remember | 0 (0%) |
| Prefer not to say | 0 (0%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## For each of the key stages that you teach, how confident are you in teaching biology, chemistry and/or physics subject content to these key stages? If you don't teach the particular subject content to a key stage, either as a single subject or as part of a combined science course, select 'Do not teach'.

| | Junior Cycle Biological World | Junior Cycle Chemical World | Junior Cycle Physical World | Junior Cycle Earth and Space | Transition Year Science | Leaving Cert Biology |
|---|---|---|---|---|---|---|
| Very unconfident | 3 (10%) | 2 (7%) | 2 (7%) | 9 (30%) | 6 (21%) | 2 (10%) |
| Somewhat unconfident | 0 (0%) | 0 (0%) | 4 (13%) | 2 (7%) | 1 (4%) | 2 (10%) |
| Neither confident nor un-confident | 0 (0%) | 1 (3%) | 2 (7%) | 4 (13%) | 5 (18%) | 0 (0%) |
| Somewhat confident | 6 (20%) | 7 (23%) | 9 (30%) | 9 (30%) | 11 (39%) | 3 (15%) |
| Very confident | 21 (70%) | 20 (67%) | 13 (43%) | 6 (20%) | 5 (18%) | 13 (65%) |
| Column n | 30 | 30 | 30 | 30 | 28* | 20* |

| | Leaving Cert Ag Science | Leaving Cert Chemistry | Leaving Cert Physics | Leaving Cert Chem and Physics | Leaving Cert Computer Science |
|---|---|---|---|---|---|
| Very unconfident | 1 (13%) | 2 (10%) | 2 (15%) | 3 (43%) | 5 (83%) |
| Somewhat unconfident | 0 (0%) | 2 (10%) | 2 (15%) | 0 (0%) | 1 (17%) |
| Neither confident nor un-confident | 2 (25%) | 3 (15%) | 2 (15%) | 0 (0%) | 0 (0%) |
| Somewhat confident | 5 (63%) | 2 (10%) | 2 (15%) | 3 (43%) | 0 (0%) |
| Very confident | 0 (0%) | 11 (55%) | 5 (38%) | 1 (14%) | 0 (0%) |
| Column n | 8* | 20* | 13* | 7* | 6* |

Filter: Teacher, Republic of Ireland only + not selected 'Do not teach' + State funded secondary schools; Unweighted; base n = 6-30. *Small sample size.

## How much time do you envisage spending with your students on the AAC (project) component of the incoming leaving certificate in chemistry?

| | % |
|---|---|
| Less than 20 hours | 0 (0%) |
| 20 hours | 2 (6%) |
| More than 20 hours | 18 (58%) |
| Don't know / Not sure | 11 (35%) |
| Column n | 31 |

Filter: Teacher, Republic of Ireland only + State funded secondary schools; Unweighted; base n = 31

## To what extent do you agree with the following statements?

| | The new Leaving Certificate chemistry specification is clear. | I feel professionally supported to deliver the new Leaving Certificate in chemistry. | I am confident with the proposed content of the new Leaving Certificate in chemistry. |
|---|---|---|---|
| Strongly agree | 0 (0%) | 0 (0%) | 1 (3%) |
| Agree | 4 (13%) | 2 (6%) | 2 (6%) |
| Neither agree nor disagree | 7 (23%) | 2 (6%) | 6 (19%) |
| Disagree | 7 (23%) | 6 (19%) | 8 (26%) |
| Strongly disagree | 6 (19%) | 14 (45%) | 7 (23%) |
| Don't know / Not sure | 7 (23%) | 7 (23%) | 7 (23%) |
| Column n | 31 | 31 | 31 |

Filter: Teacher, Republic of Ireland only + State funded secondary schools; Unweighted; base n = 31

## 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?

### *Teachers*

| | % |
|---|---|
| Mean | **6.6** |
| Column n | **31** |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

58% of teachers in ROI envisage spending more time with their students on the new AAC (project) component of the incoming leaving certificate than the 20 hours allocated. This may create a squeeze on the available teaching time to get through the required content.

The majority of teachers do not feel professionally supported to deliver the new Leaving Certificate in chemistry. Only 13% of teachers feel the new specification is clear, and 49% of teachers do not feel confident with the proposed content of the new qualification.

## The next question is about your mental well-being and will help us to better understand the well-being of teachers and technicians working in education. This question is optional and can be skipped by pressing [next].

### *Technicians*

| | % |
|---|---|
| High wellbeing (28 or greater) | **7 (23%)** |
| Moderate wellbeing (20 - 27) | **16 (52%)** |
| Low wellbeing (Less than 20) | **8 (26%)** |
| Average (Mean) | **23.2** |
| Column n | **31** |

Filter: Teachers + State funded secondary schools; Unweighted; base n = 31

## Section C

# Retention

### Summary

When asked how long they intend to stay in their current school, 16% of teacher respondents in the Republic of Ireland selected only to the end of the current academic year.

This level of attrition is the highest among all the nations. The reasons given for leaving are available below, but sample size is too small for comment.

## How long do you intend to stay at your current school?

| | % |
|---|---|
| Up to the end of the current academic year | 5 (16%) |
| Up to the end of the 25/26 academic year | 1 (3%) |
| Up to the end of the 26/27 academic year | 2 (6%) |
| Into the 27/28 academic year or beyond | 15 (48%) |
| Don't know / Not sure | 6 (19%) |
| Prefer not to say | 2 (6%) |
| Column n | 31 |

Filter Teachers + State funded secondary schools; Unweighted; base n = 31

## What are you planning to do after leaving your current school? If you have more than one plan, please select the one that is most likely.

| | % |
|---|---|
| Retirement | 2 (25%) |
| Move to a similar role at a different state school | 5 (63%) |
| Move to a different state school for promotion | 0 (0%) |
| Move to a similar role at a private/independent school | 0 (0%) |
| Move to a private/independent school for promotion | 0 (0%) |
| Move into teaching at higher education | 0 (0%) |
| Move into another role in education (not teaching) | 0 (0%) |
| I want to do something outside of education / career change | 0 (0%) |
| Have a career break | 1 (13%) |
| Other | 0 (0%) |
| Don't know / Not sure | 0 (0%) |
| Column n | 8* |

Filter Teachers + leaving by end of 26/27 academic year + State funded secondary schools; Unweighted; base n = 8.
*Small sample size.

## What are your reasons for leaving your current school?

| | % |
|---|---|
| Workload is too high / Lack of work life balance | 0 (0%) |
| High levels of stress / exhaustion | 2 (33%) |
| Having to teach outside specialism | 0 (0%) |
| Low pay | 0 (0%) |
| Lack of progression opportunities | 3 (50%) |
| Lack of respect / don't feel appreciated | 1 (17%) |
| Lack of recognition | 2 (33%) |
| Poor student behaviour | 1 (17%) |
| Issues with management | 3 (50%) |
| Want to try something different | 0 (0%) |
| Other | 3 (50%) |
| Don't know / not sure | 0 (0%) |
| Column n | 6* |

Filter Teachers + not retiring + State funded secondary schools; Unweighted; base n = 6. *Small sample size.

## You mentioned that you are planning to move out of your role at secondary school. What changes would convince you to stay on as a teacher at secondary school? Please select up to 5 factors from the following list that would be most influential.

| | % |
|---|---|
| More balanced / reduced workload | 1 (100%) |
| Better work/life balance | 1 (100%) |
| Having the option to work part-time | 0 (0%) |
| Having the option to work remotely/work from home where feasible | 0 (0%) |
| Increased pay | 0 (0%) |
| Only expected to teach content you consider yourself a specialist in | 1 (100%) |
| More opportunity for progression | 0 (0%) |
| More respect / appreciation | 0 (0%) |
| More recognition of work performance | 0 (0%) |
| More support with student behaviour | 0 (0%) |
| Less emphasis on exam results | 0 (0%) |
| Less pressure regarding assessed school performance and inspections | 0 (0%) |
| More support from parents | 0 (0%) |
| More support from senior management team | 0 (0%) |
| Increase funding for classroom/school resources | 1 (100%) |
| Timetabled / regular professional development | 0 (0%) |
| Being able to find a position in a different school | 0 (0%) |
| Other | 0 (0%) |
| There isn't anything that could convince me | 0 (0%) |
| Column n | 1* |

Filter Teachers + moving out of Secondary teaching + State funded secondary schools; Unweighted; base n = 1.
*Small sample size.

## Section D

# Challenges & barriers

### Summary

Teachers reported several challenges at classroom level. No technician/not enough technicians was the most cited challenge (84%), followed by not enough time outside of the classroom (68%), and the limited numeracy skills of students (65%). We do note that the use of science technicians varies across the school system in the Republic of Ireland.

Insufficient staff non-contact time was the largest challenge identified at school level (48%). Funding is less of a challenge for schools in the Republic of Ireland compared to the nations of the UK, with only 39% of staff citing this as a key challenge.

Respondents identified similar themes when considering barriers to running practical work in their schools. Insufficient time for practical work to be taught alongside theory (71%) and the understaffing of science technicians (61%) were the highest cited barriers.

## Which of the following present challenges to your classroom teaching in science?

| | % |
|---|---|
| Limited numeracy skills of students | 20 (65%) |
| Limited literacy skills of students | 17 (55%) |
| Insufficient classroom support, e.g. no teaching assistants | 16 (52%) |
| Student attendance | 20 (65%) |
| Challenging student behaviour | 10 (32%) |
| Inadequate teaching resources (lesson plans / scheme of work) | 7 (23%) |
| No technician/not enough technicians | 26 (84%) |
| Teaching outside of specialism | 2 (6%) |
| Lack of confidence in the subject area | 4 (13%) |
| Insufficient lab access | 14 (45%) |
| Insufficient classroom equipment | 17 (55%) |
| Not enough classroom time to cover the curriculum content | 18 (58%) |
| Not enough time outside of classroom (for planning/marking and/or assessment) | 21 (68%) |
| Other | 3 (10%) |
| There are no challenges | 0 (0%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## What challenges does your school face?

| | % |
|---|---|
| Insufficient funding | 12 (39%) |
| High staff turnover | 6 (19%) |
| Insufficient staff non-contact time | 15 (48%) |
| Lack of support to students from parent/family/guardian | 11 (35%) |
| Poor pupil attendance | 14 (45%) |
| Understaffing of teaching staff | 5 (16%) |
| Understaffing of classroom support staff | 9 (29%) |
| High staff absence | 2 (6%) |
| Insufficient support from leadership | 11 (35%) |
| Negative working environment | 8 (26%) |
| Lack of collaboration/teamwork amongst staff | 11 (35%) |
| Not enough support for inexperienced teachers | 9 (29%) |
| Other | 2 (6%) |
| There are no challenges | 1 (3%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## What support do you need to address these challenges, either in the classroom and/or across the school?

| | % |
|---|---|
| Consistent policies including behaviour management, attendance and learning and teaching | 10 (32%) |
| More funding | 13 (42%) |
| More non-contact time (for planning, PD, practising practical work) | 23 (74%) |
| More classroom support staff | 17 (55%) |
| Support from leadership | 10 (32%) |
| Greater access to subject specific professional development | 13 (42%) |
| Greater collaboration with colleagues | 13 (42%) |
| Protected non-contact time | 19 (61%) |
| Leadership led cultural shift | 12 (39%) |
| Other | 3 (10%) |
| Don't require support | 1 (3%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## Thinking about the last 12 months, with each of your KS3 / Third Level/ Junior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 8 (29%) | 9 (32%) | 4 (14%) |
| At least once a fortnight | 12 (43%) | 3 (11%) | 5 (18%) |
| At least once a month | 5 (18%) | 7 (25%) | 5 (18%) |
| Once every couple of months | 2 (7%) | 6 (21%) | 7 (25%) |
| Less often | 1 (4%) | 2 (7%) | 6 (21%) |
| Never | 0 (0%) | 1 (4%) | 1 (4%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 28* | 28* | 28* |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 28. *Small sample size.

## Thinking about the last 12 months, with each of your GCSE / National 5 / Transition Year classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 13 (50%) | 7 (27%) | 4 (15%) |
| At least once a fortnight | 6 (23%) | 5 (19%) | 3 (12%) |
| At least once a month | 5 (19%) | 4 (15%) | 3 (12%) |
| Once every couple of months | 1 (4%) | 2 (8%) | 3 (12%) |
| Less often | 1 (4%) | 5 (19%) | 9 (35%) |
| Never | 0 (0%) | 3 (12%) | 4 (15%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 26* | 26* | 26* |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 26. *Small sample size.

## Thinking about the last 12 months, with each of your A-Level / Higher / Senior Cycle classes, how often did you generally do the following in science lessons?

| | Hands on practical work | A teacher demonstration of a practical | Watching a video of a practical |
|---|---|---|---|
| At least once a week | 8 (27%) | 7 (23%) | 6 (20%) |
| At least once a fortnight | 10 (33%) | 3 (10%) | 3 (10%) |
| At least once a month | 10 (33%) | 7 (23%) | 5 (17%) |
| Once every couple of months | 2 (7%) | 2 (7%) | 5 (17%) |
| Less often | 0 (0%) | 9 (30%) | 10 (33%) |
| Never | 0 (0%) | 2 (7%) | 0 (0%) |
| Don't know | 0 (0%) | 0 (0%) | 1 (3%) |
| Column n | 30 | 30 | 30 |

Filter: Teachers only + not selected 'I don't teach this age range' + State funded secondary schools; Unweighted; base n = 30

## What are the barriers you face to running practical work in your school?

| | % |
|---|---|
| Understaffing of science technicians | 19 (61%) |
| Insufficient time for practical to be taught alongside theory | 22 (71%) |
| Lack of equipment | 17 (55%) |
| No time for training/practicing | 12 (39%) |
| Health and safety concerns | 9 (29%) |
| Challenging student behaviour | 10 (32%) |
| Cost of consumables and chemicals | 8 (26%) |
| Lack of confidence in delivering practical sessions | 5 (16%) |
| Insufficient lab access | 12 (39%) |
| Unsuitable labs | 9 (29%) |
| Other | 1 (3%) |
| No barriers | 1 (3%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## Section E

# Professional development

## Summary

Over the period of February 2024 to February 2025, 11% of those teaching chemistry did not access any subject specific professional development (compared to 18% of those teaching biology and 25% of those teaching physics). This suggests improved access to subject-specific professional development for teachers in the Republic of Ireland, however the sample size is small.

30% of those teaching chemistry felt the amount of time they undertook subject-specific professional development was insufficient, or somewhat insufficient. Teachers reported that having to attend courses in their own time (71%) and the availability of courses (58%) were the biggest barriers to accessing subject-specific PD.

Broadly, teachers in the Republic of Ireland have the greatest access to subject-specific professional development, and are more satisfied with the time spent doing so, compared to teachers in all the other nations surveyed.

## Thinking about the last 12 months (since February 2024), please select the number of hours of subject specific professional development that you received for each of the following subjects:If you didn't teach this subject in the last 12 months, please select 'Not applicable - don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| 0 hrs - Didn't access any professional development | 3 (18%) | 2 (11%) | 3 (25%) | 3 (13%) | 2 (11%) |
| Up to 5 hours | 7 (41%) | 6 (32%) | 0 (0%) | 8 (35%) | 8 (42%) |
| 5 - 9 hours | 4 (24%) | 6 (32%) | 2 (17%) | 7 (30%) | 5 (26%) |
| 10 – 14 hours | 2 (12%) | 1 (5%) | 3 (25%) | 2 (9%) | 3 (16%) |
| 15 – 19 hours | 0 (0%) | 2 (11%) | 1 (8%) | 0 (0%) | 0 (0%) |
| 20 - 24 hours | 0 (0%) | 1 (5%) | 1 (8%) | 1 (4%) | 1 (5%) |
| 25 - 29 hours | 0 (0%) | 0 (0%) | 1 (8%) | 0 (0%) | 0 (0%) |
| 30 - 34 hours | 1 (6%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| 35+ hours | 0 (0%) | 1 (5%) | 1 (8%) | 0 (0%) | 0 (0%) |
| Don't know | 0 (0%) | 0 (0%) | 0 (0%) | 2 (9%) | 0 (0%) |
| Column n | 17* | 19* | 12* | 23* | 19* |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 12-23. *Small sample size.

## Thinking again about the last 12 months (since February 2024). Was the amount of time that you undertook subject specific professional development for each subject…? If you didn't teach this subject in the last academic year, please select 'Not applicable – don't teach this subject'.

| | Biology | Chemistry | Physics | General Science | Non-science subjects |
|---|---|---|---|---|---|
| Insufficient | 5 (29%) | 4 (24%) | 2 (18%) | 10 (38%) | 1 (6%) |
| Somewhat insufficient | 3 (18%) | 1 (6%) | 2 (18%) | 4 (15%) | 2 (13%) |
| Neither sufficient nor insufficient | 2 (12%) | 1 (6%) | 2 (18%) | 1 (4%) | 2 (13%) |
| Somewhat sufficient | 4 (24%) | 7 (41%) | 3 (27%) | 8 (31%) | 3 (19%) |
| Sufficient | 3 (18%) | 4 (24%) | 2 (18%) | 3 (12%) | 7 (44%) |
| Don't know / Can't remember | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 1 (6%) |
| Not applicable – don't teach this subject | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 17* | 17* | 11* | 26* | 16* |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 11-26.
*Small sample size.

## Which of the following barriers apply to your own experience of accessing subject specific professional development?

| | % |
|---|---|
| Lack of funding for cover teachers | 10 (32%) |
| Lack of available cover teachers | 12 (39%) |
| Course cost & expenses to attend courses | 5 (16%) |
| School policy restricts the type of courses I can attend | 4 (13%) |
| Having to attend PD courses/training in my own time | 22 (71%) |
| Availability of courses | 18 (58%) |
| Lack of knowledge about opportunities | 7 (23%) |
| Not having access to the required technology/software/learning platforms, etc. | 4 (13%) |
| Prohibitive travel time / distance | 5 (16%) |
| Other | 3 (10%) |
| There are no barriers | 1 (3%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## Why is subject-specific professional development important to you?

| | % |
|---|---|
| It keeps me up to date with new scientific developments | 25 (81%) |
| It helps me to develop my expertise in areas I haven't taught before | 20 (65%) |
| It gives me new ideas to improve my teaching based on the latest education research | 29 (94%) |
| It increases my confidence in using practical activities in my lessons | 21 (68%) |
| It helps me to develop teaching approaches to meet specific learner needs | 22 (71%) |
| It helps me contextualise the curriculum | 15 (48%) |
| It allows me to share ideas and learn from other teachers outside of my classroom | 21 (68%) |
| It increases my enthusiasm for my subject | 21 (68%) |
| Other, please elaborate | 0 (0%) |
| It's not important to me | 1 (3%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## Aside from statutory PD e.g. safeguarding, what are your school's priorities for CPD?

| | % |
|---|---|
| Developing the leadership talent pipeline | 4 (13%) |
| Developing leadership skills of those in post | 4 (13%) |
| Improving teacher subject expertise | 8 (26%) |
| Prioritising whole school PD based on the school improvement plan | 17 (55%) |
| Developing teaching approaches to meet specific learner needs | 8 (26%) |
| Contextualising subjects | 1 (3%) |
| Other, please elaborate | 0 (0%) |
| Don't know | 10 (32%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## Section F

# Vocational pathways

## Summary

Teachers in the Republic of Ireland have the least confidence in linking the curriculum to both real-life contexts and scientific careers, and providing information on both academic and technical/vocational routes into careers. For example, only 49% of teachers in the Republic of Ireland feel somewhat or very confident in providing information on academic routes, compared to 76% of teachers in Scotland.

We asked teachers about their awareness of and advocacy for different academic and vocational science pathways. Teachers in the Republic of Ireland report lower levels of awareness of and advocacy for undergraduate degrees compared to all other nations. There are also low levels of advocacy for various apprenticeship routes. The established leaving certificate is by far the most advocated for route at level 3.

## How confident do you feel about the following areas?

| | Linking the curriculum to real-life contexts | Linking the curriculum to scientific careers | Providing information on academic routes into scientific careers | Providing information on technical/vocational routes into scientific careers |
|---|---|---|---|---|
| Very unconfident | 2 (7%) | 1 (3%) | 3 (10%) | 6 (19%) |
| Somewhat unconfident | 4 (13%) | 5 (16%) | 5 (16%) | 11 (35%) |
| Neither confident nor unconfident | 2 (7%) | 4 (13%) | 8 (26%) | 6 (19%) |
| Somewhat confident | 14 (47%) | 16 (52%) | 12 (39%) | 7 (23%) |
| Very confident | 8 (27%) | 5 (16%) | 3 (10%) | 1 (3%) |
| Don't know / Not sure | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Not applicable / Don't include in my teaching | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Column n | 30 | 31 | 31 | 31 |

Filter: Teachers only + not selected 'Not applicable' + State funded secondary schools; Unweighted; base n = 30-31

## For each of the following academic and vocational science pathways, please tell us which you are aware of and advocate to your students.

| | Established Leaving Certificate | Leaving Certificate Vocational Programme | Leaving Certificate Applied | International Baccalaureate |
|---|---|---|---|---|
| Not aware | 1 (3%) | 2 (6%) | 0 (0%) | 11 (35%) |
| Aware but don't advocate | 1 (3%) | 16 (52%) | 13 (42%) | 13 (42%) |
| Aware and advocate to my students | 29 (94%) | 10 (32%) | 15 (48%) | 1 (3%) |
| Don't know / Not sure | 0 (0%) | 3 (10%) | 3 (10%) | 6 (19%) |
| Column n | 31 | 31 | 31 | 31 |

| | Advanced Apprenticeships | Apprenticeship | Further Education Courses | Undergraduate degree |
|---|---|---|---|---|
| Not aware | 14 (45%) | 7 (23%) | 6 (19%) | 3 (10%) |
| Aware but don't advocate | 8 (26%) | 9 (29%) | 6 (19%) | 4 (13%) |
| Aware and advocate to my students | 2 (6%) | 9 (29%) | 15 (48%) | 24 (77%) |
| Don't know / Not sure | 7 (23%) | 6 (19%) | 4 (13%) | 0 (0%) |
| Column n | 31 | 31 | 31 | 31 |

Filter: Teachers, Republic of Ireland only + State funded secondary schools; Unweighted; base n = 31

## What are the barriers, if any, that prevent you from advocating for vocational pathways to your students?

| | % |
|---|---|
| Lack of detailed knowledge about the pathways | 0 (0%) |
| Lack of funding | 0 (0%) |
| Lack of local availability of courses | 0 (0%) |
| Lack of local availability of placements | 0 (0%) |
| School is focused on academic pathways | 1 (100%) |
| Don't know / Not sure | 0 (0%) |
| Other | 0 (0%) |
| There are no barriers | 0 (0%) |
| Column n | 1* |

Filter: Teachers, Not advocated to any vocational pathways only + State funded secondary schools; Unweighted; base n = 1. *Small sample size.

## What are the barriers for you working with external organisations to deliver outreach activities to your students?

| | % |
|---|---|
| Limited time | 25 (81%) |
| Funding | 16 (52%) |
| Student behaviour | 5 (16%) |
| Lack of support and encouragement from senior leaders | 7 (23%) |
| Lack of interest / engagement from local organisations, companies etc | 7 (23%) |
| Safeguarding concerns | 4 (13%) |
| Lack of awareness of opportunities | 12 (39%) |
| I don't see the benefits for students | 1 (3%) |
| Lack of my time to organise | 20 (65%) |
| Lack of time within the school day to enable this | 18 (58%) |
| Other priorities/pressures (eg Ofsted) | 4 (13%) |
| Lack of interest / engagement from local organisations, companies etc | 0 (0%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## Section G

# Digital technology

### Summary

Teachers across the nations appear to have comparable levels of access to digital technology.

90% of teachers in the Republic of Ireland agree or strongly agree that they can use digital technology when needed and 58% agree or strongly agree that they are confident in using digital tools.

Despite the highest level of access to digital technology across the nations, 29% of teachers never use digital tools in their science lessons.

## Have you ever used AI within your role?

| | % |
|---|---|
| Yes | 23 (74%) |
| No | 8 (26%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## Which of the following AI-powered tools or technologies (if any) have you used or experimented with in your teaching practice?

| | % |
|---|---|
| Grammarly | 4 (17%) |
| magic.ai | 4 (17%) |
| Teachermatic | 0 (0%) |
| Teachmateai | 0 (0%) |
| Riffbot | 0 (0%) |
| Revisely | 0 (0%) |
| Copilot | 5 (22%) |
| ChatGPT | 23 (100%) |
| DALL-E 3 | 2 (9%) |
| Oak Aila lesson planning tool | 0 (0%) |
| Google Bard | 3 (13%) |
| Other, please provide | 3 (13%) |
| Column n | 23* |

Filter: Have used AI + State funded secondary schools; Unweighted; base n = 23. *Small sample size.

## To what extent do you agree with the following statement?I am able to use digital technology (e.g. computer room / tablets / laptops / WiFi) when needed.

| | % |
|---|---|
| Strongly agree | 19 (61%) |
| Agree | 9 (29%) |
| Neither agree nor disagree | 1 (3%) |
| Disagree | 2 (6%) |
| Strongly disagree | 0 (0%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## How often does your department use digital tools in your lessons, e.g. light gates, digital microscopes?

| | % |
|---|---|
| Every week | 7 (23%) |
| Once a topic (where relevant) | 10 (32%) |
| Once a term | 4 (13%) |
| Never | 9 (29%) |
| Don’t know / Not sure | 1 (3%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

## To what extent do you agree with the following statement? I am confident in using digital tools in my teaching.

| | % |
|---|---|
| Strongly agree | 11 (35%) |
| Agree | 7 (23%) |
| Neither agree nor disagree | 4 (13%) |
| Disagree | 5 (16%) |
| Strongly disagree | 3 (10%) |
| Don’t know / Not sure | 0 (0%) |
| Column n | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

Section H

# Additional support and resources

## Summary

48% of teachers somewhat or strongly agree that students with SEND/ALN have access to the support and resources needed to engage in science lessons comparably with their peers. Similarly, 45% of teachers somewhat or strongly agree that students with SEND/ALN have access to support and resources needed to participate in all practical activities in science lessons.

84% of respondents felt that more teaching assistant support would improve the equitable experience of students with SEND/ALN in science lessons.

## How far do you agree with the following statements?

| | Students with SEND/ALN have access to any additional support/resources needed to engage in science lessons comparably to their peers | Students with SEND/ALN have access to any additional support/ resources needed to participate in all practical activities in science lessons |
|---|---|---|
| Strongly agree | 2 (6%) | 3 (10%) |
| Somewhat agree | 13 (42%) | 11 (35%) |
| Neither agree nor disagree | 8 (26%) | 3 (10%) |
| Somewhat disagree | 5 (16%) | 9 (29%) |
| Strongly disagree | 3 (10%) | 4 (13%) |
| Don't know / Not sure | 0 (0%) | 1 (3%) |
| Column n | 31 | 31 |

Filter: Teachers only + State funded secondary schools; Unweighted; base n = 31

## For your school/department, what would improve the equitable experience of students with SEND/ALN in science lessons?

| | % |
|---|---|
| More teaching assistant support | 26 (84%) |
| Specialist practical equipment (materials, ear defenders, quiet classroom areas etc) | 13 (42%) |
| More training on specific strategies for SEND/ALN students | 20 (65%) |
| Teaching resources that are accessible for SEND/ALN learners | 19 (61%) |
| Specialist technology | 9 (29%) |
| Other | 0 (0%) |
| Column n | 31 |

Filter: State funded secondary schools; Unweighted; base n = 31

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