Agenda – Children, Young People and Education Committee

Meeting Venue:
Hybrid – Committee room 4 Tŷ Hywel and video conference via Zoom
Meeting date: 18 June 2025
Meeting time: 09.30

For further information contact:
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Hybrid

Private pre-meeting

09.00 – 09.15

Public meeting

09.15 – 12.20

1 Introductions, apologies, substitutions and declarations of interest

09.15

2 Teacher recruitment and retention – evidence session 4

09.15 – 10.15 (Pages 1 – 31)

Claire Armitstead, Director, Association of School and College Leaders (ASCL) Cymru

Neil Foley, Vice President, Association of School and College Leaders (ASCL) and Headteacher of Prestatyn High School

Laura Doel, National Secretary, National Association of Head Teachers (NAHT) Cymru

Attached Documents:

Research brief

Paper 1 – Association of School and College Leaders (ASCL) Cymru

Paper 2 – National Association of Head Teachers (NAHT) Cymru

Break

10.15 - 10.30

3 Teacher recruitment and retention - evidence session 5

10.30 - 11.30 (Pages 32 - 71)

Annette Farrell, Programme Manager, Education Policy, Royal Society of Chemistry

Shabana Brightley, Senior Education Policy Officer, Royal Society of Biology

Eluned Parrott, Head of Institute of Physics Wales

Attached Documents:

Paper 3 - Royal Society of Chemistry

Paper 4 - Royal Society of Biology

Paper 5 - Institute of Physics Wales

4 Teacher recruitment and retention - evidence session 6

11.30 - 12.20

Kerry Bevan, the Association for Language Learning

5 Papers to note

12.20

5.1 Legislative Consent: Children's Wellbeing and Schools Bill

(Pages 72 - 73)

Attached Documents:

Information from Individual

5.2 Intergovernmental relations and workings

(Page 74)

Attached Documents:
Letter to the Chair of the Legislation, Justice and Constitution Committee from the Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs

5.3 Teacher recruitment and retention

(Page 75)

Attached Documents:
Additional information from the NASUWT following the meeting on 5 June 2025

5.4 Information from Stakeholders

(Page 76)

Attached Documents:
Letter to the Cabinet Secretary for Education from the Chief Investigator, Sunproofed Study, Swansea University

5.5 Teacher recruitment and retention

(Pages 77 – 89)

Attached Documents:
Additional information from the NEU following the meeting on 5 June 2025

6 Motion under Standing Order 17.42(ix) to resolve to exclude the public from the remainder of this meeting

12.20

Private meeting

12.20 – 12.30

7 Teacher recruitment and retention – consideration of the evidence

12.20 – 12.30

Agenda Item 2

Document is Restricted

ASCL Cymru written evidence - Teacher recruitment and retention – June 2025

Barriers to recruitment:

1. Declining numbers ITT secondary
    - Significant shortage subjects' maths, science and Welsh
        - But also, music, MFL, IT
2. The average number of applicants per vacancy has more than halved since 2011
    - Less candidates are applying for each role
        - Rurality, areas of challenge and Welsh medium being most effected
    - ASCL Survey on teacher shortages states
        - 95% of those responding were experiencing difficulty in recruiting teachers.
        - 42.8% were experiencing severe difficulty in recruiting teachers.
        - With 90.8 % receiving small numbers of applicants and 69.4% receiving no applicants at all for some posts
3. Candidate quality, anecdotally, has lessened meaning fewer appropriate candidates, in an already smaller recruitment field are appointable
4. Other job markets are seen as more attractive to the best graduates providing
    - Flexible working
    - A better work life balance
    - Access to higher salaries with less stress and workload
5. Perception of education
    - Negative perceptions of the media can discourage entry to the profession and contribute to teacher burnout, making recruitment and retention more challenging
    - The role of education in communities has been skewed and, in some cases, lost, as other services reduced their offer, and schools have had to mitigate and adapt to fill the gaps.
    - Pupils and community behaviours are seen a worsening
6. Routes into teaching
    - Current routes into education are failing to address the recruitment issues and wider, more flexible routes need to be found

Factors affecting retention

7. This includes a focus on priority subjects, Welsh medium, secondary schools and the effectiveness of early career support).
8. Annual Education Workforce Statistics 2024
    - 76% of that cohort retained after 5 years
    - 57.5% of that cohort retained after 10
9. Ninety per cent of teachers considering leaving teaching in 2023/24 cited high workload as a factor, and pupil behaviour has become one of the fastest-growing contributors
10. Limited opportunities for flexible working arrangements

School Leaders- specific factors affecting recruitment and retention of school leaders

11. Educational leadership roles remain unfilled. A survey of headteachers conducted by the ASCL found that.
    - 72.4% of respondents did not feel that they had an acceptable work/life balance,
    - 47.7% believe their workload to be unmanageable.
    - More than half of the survey respondents said that they were considering leaving the profession.
12. Accountability
    - From pupils, parent, communities, local authorities and the inspectorate. School leaders expect and want accountability, but accountability that is proportionate and supports sustained school improvement activity
    - Personal and organisational accountability
    - Lack of understanding of context and its impact, meaning those successfully leading in challenging contexts often have their impact and value added discounted
13. Leadership recruitment is impacted by the role leaders are seen to play by other practitioners in the school. Their role is seen as:
    - Workload extreme - school leaders regularly and consistently working over 50 hours weekly, during a normal week. In a challenging week this can be in excess of 60 hours. This workload is the norm and the impact that recent reforms have had on it is seen to be extreme
    - Accountability - other practitioners see the high levels of personal and public accountability to which school leaders are held and how this is often negatively portrayed on social media and in the press.
    - School leaders are seen to no longer have the support of parents and communities and this is seen as societal change that is unlikely to change. Issues previously discussed in private are now discussed in social media; naming, ridiculing and often defaming school leaders publicly
    - Due to this fewer middle leaders are aspiring to be senior leaders
14. Over the last decade, the number of applicants per senior leadership vacancy has varied widely across secondary and all-age schools in Wales, with some indications of a relation between rurality and shortage of candidates.
    - A relatively low number of candidates and a significant percentage of vacancies unfilled.

- Welsh-medium vacancies are consistently harder to fill.
- Other factors that were mentioned as potential barriers to progression into senior leadership included a lack of representation, a lack of confidence, and negative perceptions of senior leadership roles.
- The main challenges reported were high workloads, poor work-life balance, a sense of isolation in leadership roles, excessive bureaucracy and administrative responsibilities, limited funding, the roles negatively impacting on the health and well-being of senior leaders, training and development not being sufficient to prepare senior leaders for the challenges of the roles, and uncertainties around retirement and pensions.

Diversity of the workforce

15. It is important to consider whether the current and future workforce reflects the diversity of the Welsh population including gender, race and ethnicity and disability.
16. Recent statistics demonstrate that diversity in the workforce does not reflect the population of Wales

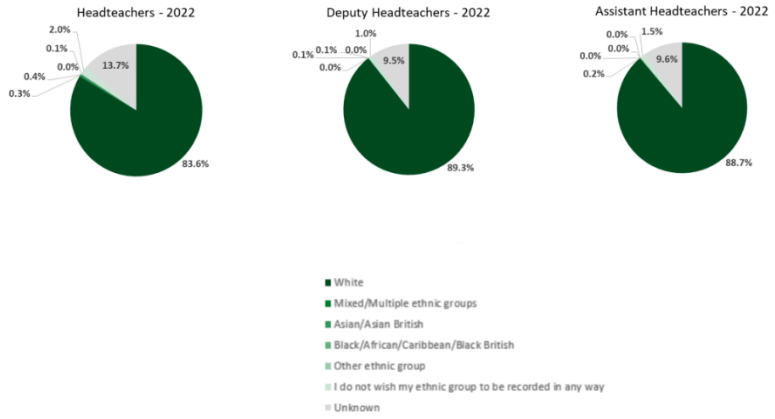
Table 2.6: Number of registered school teachers who have made a declaration regarding their disability.

	2020		2021		2022		2023		2024	
	Number	%	Number	%	Number	%	Number	%	Number	%
Yes	215	0.6	256	0.7	310	0.9	369	1.0	415	1.2
No	34,956	99.4	34,510	99.3	34,946	99.1	35,468	99.0	35,450	98.8
Total	**35,171**	**100**	**34,766**	**100**	**35,256**	**100**	**35,837**	**100**	**35,865**	**100**

Table 2.4: Number of registered school teachers by ethnic group.

	2020		2021		2022		2023		2024	
	Number	%	Number	%	Number	%	Number	%	Number	%
White	32,075	91.2	31,847	91.6	32,421	92.0	33,086	92.3	33,167	92.5
Mixed or multiple ethnic groups	189	0.5	182	0.5	195	0.6	214	0.6	240	0.7
Asian or Asian British	176	0.5	189	0.5	226	0.6	254	0.7	288	0.8
Black, African, Caribbean or Black British	64	0.2	68	0.2	73	0.2	82	0.2	89	0.2
Other ethnic group	40	0.1	40	0.1	51	0.1	58	0.2	63	0.2
Does not wish to record ethnic group	447	1.3	467	1.3	472	1.3	463	1.3	454	1.3
Unknown	2,180	6.2	1,973	5.7	1,818	5.2	1,680	4.7	1,564	4.4
Total	**35,171**	**100**	**34,766**	**100**	**35,256**	**100**	**35,837**	**100**	**35,865**	**100**

17. Our workforce is predominantly white and able bodied.
18. At a leadership level this is emphasised



19. Although the workforce is female heavy this is not seen in school leadership within secondary schools where the number of female headteachers is significantly lower than males

	Secondary Sector Working									
	March 2018		March 2019		March 2020		March 2021		March 2022	
	Number	%	Number	%	Number	%	Number	%	Number	%
Male	122	64.6	122	65.2	117	65.4	121	67.6	119	67.2
Female	67	35.4	65	34.8	62	34.6	58	32.4	58	32.8
Total	**189**	**100**	**187**	**100**	**179**	**100**	**179**	**100**	**177**	**100**

Impact on learners

20. The current position has a negative impact upon the delivery of education and on wider support for learners.

21. Without the staff to deliver the curriculum offer pupil outcomes and life chances will continue to be negatively impacted.

22. Those in the system who are mitigating for unfilled roles have disproportionate workloads, meaning they are likely to be less effective when fulfilling their primary role

Impact on delivering educational reforms: **including the Curriculum for Wales. Additional Learning Needs and Education Tribunal (Wales) Act 2018 and the Welsh Language and Education (Wales) Bill.**

23. Without the staff to deliver the reform, it will be impacted.

    - ALN bill has increased workload in a depleted sector
    - Welsh Language and Education Bill is our greatest concern
        - There are not enough people in the current system to deliver this
        - Ther are not enough people training to give the system this capacity

Impact on teachers and wider workforce: including impact on the role of teaching assistants and support staff and the effect of schools' capacity to finance the use of supply teachers.

24. Each individual's workload increases as the number of posts unfilled increases

25. Each individual's workload increases as the number of posts that can be financed in a school are reduced

26. Education does not have a waiting list; our statutory functions must be met. This is achieved by a dedicated workforce who see their role as protectors, enablers and educators of children. This is a perfect storm where insufficient school finances increasingly reduce the number of staff that can be appointed and, in other situations posts remain vacant where staff cannot be recruited. We are creating a culture in education where a smaller workforce, working under unsustainable pressure, are doing more, risking their own health and wellbeing in so doing.

Addressing recruitment and retention:

27. This is a summary of some of the actions that are necessary to ensure the sustainability of the education workforce to address the current crisis or recruitment and retention.

28. Workload:

    - I cannot state strongly enough the workload crisis evident in schools across Wales
    - It is an absolute priority that this issue is addressed in the short term
    - Without addressing this issue, no incentives, no enticement and no routes into the profession will attract and keep the best teachers and leaders within our education system
    - In all phases, in all areas across Wales, school practitioners tackle a workload that is unrealistic and unachievable. This impacts on their physical and mental health, alongside their family life and relationships

- We see a workforce working excessive hours to just address their key role. There is perception that teachers work from 8am to 3pm during term time and have frequent, lengthy holidays. Currently just to stand still, not to develop or reform, educators work extended hours that put their health at risk.
- School leaders' workload is extreme. School leaders have no protected rights to weekends or holidays and this needs to be addressed in the STPCWD immediately. How do we expect to attract leaders into a role where their recovery time is not acknowledged let alone protected?
- The level of unnecessary bureaucracy must be reduced. Government workload reduction workstreams must identify more effective methods of impacting upon this.

29. PPA is not fit for purpose and needs to be addressed urgently
    - Classroom practitioners receiving 10% of their allocated hour for PPA is insulting. It does not, in any way, meet the needs of their requirement to plan, prepare and assess and means there is no choice for teachers other than working well beyond their contracted hours
        - A small example:
            - A science teacher in a secondary school may teach 10 different classes
            - Each class contains 30 children
            - In 5 hours, every fortnight they must
                - Plan for 45 hours of teaching sessions
                - Plan to assess 300 children
                - Mark and give meaningful feedback in 300 books
30. Perception – a recognition of the vital role that teachers and school leaders play in the developing lives of children and young people. This includes parents and public perception as well as the media, and within the profession itself.
31. Pay has been eroded in real terms since 2010. It is essential that this deficit is adjusted so that the profession is remunerated appropriately.
32. Inspection and high stakes accountability activities must be reviewed and reduced where it is not evident that they have a direct impact upon improved learner outcomes
33. Targeted financial incentives can significantly improve teacher retention rates. Successful schemes typically offer incentives worth 5-10% of base salary, often focused on early career teachers in shortage subjects and disadvantaged areas.(Incentives to recruit and retain teachers in Wales - Education Policy Institute)
34. Educator must be given the same protections as other public services
35. In conclusion, the challenges surrounding teacher recruitment and retention in Wales are systemic, urgent, and worsening. Declining numbers of applicants, especially in key subjects and rural or Welsh-medium settings, reflect deeper issues within the profession; most notably, unsustainable workloads, poor work-life balance, and diminishing societal and media support. The perception of teaching as a high-stress, low-reward career deters potential candidates and drives current practitioners to leave. Leadership roles face even starker pressures, with high accountability, excessive hours, and a lack of support contributing to a dwindling pipeline of future leaders. Without immediate, bold, and coordinated action—reducing workload, improving pay and conditions, reforming

accountability, and genuinely valuing the profession—the ability to deliver vital educational reforms, ensure equity, and support the future of Wales's learners will be severely compromised.

36. The sustainability of the education workforce must now be treated as a national priority.

Claire Armitstead – ASCL Cymru Director

June 2025

NAHT Cymru response – Teacher Recruitment and Retention

NAHT is the UK's largest professional trade union for school leaders. We represent more than 38,000 head teachers, executive heads, ALNcos, deputy and assistant heads, vice principals and school business leaders.

Our members work across: the early years, primary, special and secondary schools; independent schools; sixth form and FE colleges; outdoor education centres; pupil referral units, social services establishments and other educational settings.

In addition to the representation, advice and training that we provide for existing school leaders, we also support, develop and represent the school leaders of the future, through the middle leadership section of our association. We use our voice at the highest levels of government to influence policy for the benefit of leaders and learners everywhere.

Pay parity

NAHT continues to raise our concerns around the disparity in pay faced by the sector in comparison to other graduate professions, making teaching a less attractive career choice and the impact this has on recruitment and retention.

While NAHT welcomed the pay award of 5.5% last year, that only begins to address the entrenched issue. Prior to that, more than a decade of below inflation pay uplifts have eroded both the real value of teachers' and leaders' salaries and undermined the relative attractiveness of a career in teaching, as the competitiveness of salaries has declined.

Teaching professionals' salaries have fallen well behind other graduate occupations. Private sector earnings have grown at a much faster rate than the earnings of teaching professionals, as relative earnings for teachers and school leaders have fallen by 10%.

Notwithstanding last year's welcome uplift, the competitiveness of teachers' and leaders' pay has fallen markedly over a number of years by comparison to the whole economy, the wider public sector and other professional occupations.

The supply of teachers and leaders is now in such serious free fall that there is almost no area where recruitment is sufficient. Teachers' and leaders' pay remains in need of a major correction and with CPI inflation having run at very high levels in recent years, the uplift in pay has failed to prevent a further deterioration in the real terms value of salaries.

Moreover, teaching salaries deteriorated against other workers' earnings. As of January 2025, according to ONS, the annual growth in average weekly earnings is currently 5.6% - 4.1% for the public sector, and 6.0% for the private sector.

Despite the uplift, 'the competitiveness of teachers' and leaders' pay declined in the graduate marketplace, and the ongoing and longstanding pay erosion, that has rendered teaching unattractive to high quality applicants, has continued.

Overwhelming evidence confirms that the supply crisis affects recruitment and retention equally. It is not limited to a failure of the market in a handful of areas or subjects. The crisis

is evident across all almost all subjects, across all geographical areas, phases and specialisms, and affects aspiration to lead and leadership retention. The notion that such deep-seated problems can be resolved through flattening pay or targeting uplifts is unquestionably wrong.

The leadership pipeline and strain on the profession

Our evidence to successive remits to both the STRB and now the IWPRB has pointed to the damage caused to the pay framework by past 'differentiated' pay uplifts that have been 'targeted' in favour of early career teachers.

It has for several years now been a worrying trend that school leaders' roles and responsibilities are not being recognised, while still being expected to do more with less.

NAHT is deeply concerned that the gap between leadership and the main pay range (MPR) is continuing to narrow. Understandably, our members are angry and demoralised by this trend, especially given that the aim of devolved pay and conditions was to allow the Welsh Government the opportunity to reflect the specific needs of the education system in Wales.

NAHT has called on the Independent Welsh Pay Review Body (IWPRB) to recognise this within its response to the 6th remit.

In contrast to the other OECD countries, statutory teachers' salaries in Wales fell by around 10 per cent between 2007 and 2017.

For years, leadership throughout the whole Welsh education system has been cited consistently within Welsh Government policy (not simply formal leadership positions) – including within the Professional Standards for Teaching and Leadership.

Any continued differentiated pay uplift within Wales threatens to exacerbate the leadership recruitment and retention crisis and create a divided profession when collaboration and collective approaches will be required to realise Welsh Government policy aspirations for children and young people.

Once again, the Welsh Government has failed to take the opportunity to redress this issue.

Furthermore, it has exacerbated the situation when school leaders are under incredible pressure.

We continue to receive a high volume of calls from members looking to access their pensions early and prepared to suffer the financial penalties and accessing them before they have matured.

This action alone should ring alarm bells throughout the profession that there is a surge in school leaders taking early retirement, taking their experience and knowledge with them.

Workload

NAHT took industrial action in 2023 in the form of action short of strike over a host of concerns relating to the conditions of service of our members, including workload.

There was a commitment from the then Education Minister Jeremy Miles to tackle this issue and despite over a year's worth of discussion, there has been little change in the workload of school leaders.

While we accept efforts have been made to reduce the administrative burdens on leaders, particularly around grant reporting, additional pressure placed on headteachers who are taking on significant responsibilities far beyond the scope of education are having a detrimental impact on their workload.

School leaders tell us they spend a significant amount of time dealing with social services, HR, finance issues rather than leading teaching and learning.

Poor ALN support for schools exacerbates the issue.

This means than aspiring headteachers who are currently in middle leadership roles have no desire to take on headship, because of the workload implications.

Furthermore, the Welsh Government promised unions that every new policy or legislation coming through government following industrial action would be subject to a Workload Impact Assessment.

Again, over a year's worth of discussions has yet to result in such an assessment tool being produced, let alone come into force.

Impact of government policy

One of the biggest challenges facing school leaders which has an impact on workload and therefore impact the recruitment and retention of school leaders, is new government policy.

While we appreciate that all governments have a responsibility to review policy and reform education for the benefit of learners, there has been a consistent lack of understanding about the impact such reforms have on the workforce.

One example would be the Welsh Language and Education Bill which did not, from the outset, appropriately consider how such a reform would impact workload and therefore the implications it may or may not have on recruitment and retention.

There was no Workforce Impact Assessment carried out on the new legislation so government and the education sector had no idea what this would mean for schools.

This has resulted in a lot of anxiety for the workforce, concerned about their own ability to deliver the legislation effectively.

NAHT has consistently supported the aims and ambitions of the legislation, but our concerns raised on behalf of our members about what it will mean for them have largely been ignored.

This means school leaders in particular are under immense pressure to deliver when no-one has even considered what support they may need to thrive.

Access to training, funding to cover staff released for that training, availability of support etc are just some of the things that haven't been thought through.

NPQH

NAHT is deeply concerned about the reform of NPQH and the process by which aspiring leaders are accepted onto the course.

Firstly, it was disappointing that reforming the previous NPQH offer meant a freeze on those being able to apply for over a year. While we appreciate reform was needed, the existing course could have continued until the new programme was ready. This in our view caused an unnecessary gap which has hampered the supply chain.

Secondly, while some of the reformed elements of NPQH are welcomed, we are unhappy with the way in which applicants are selected.

The Welsh Government has limited the number of applicants to around 35 per cohort for the whole of Wales. Given we know there is a recruitment and retention crisis, this seems completely inappropriate.

NAHT is still seeking clarity on how the applicants are chosen. There have been reports that Local Authority 'demand' is part of the criteria, with preferential treatment being given to those LAs who are either struggling to recruit leaders or who will have leadership vacancies in the near future. If this is the case, this means those aspiring leaders in Local Authorities who may have several people interested in NPQH but do not necessarily have the recruitment challenges as neighbouring LAs, are at a significant disadvantage.

Furthermore, this is very shortsighted given that leaders very often choose to move Local Authorities frequently and it is not inconceivable, particularly in South Wales, for aspiring headteachers from Cardiff or Newport, where there might not be such a demand for headteachers, could apply for roles in Blaenau Gwent, Torfaen, Powys and as far afield as Carmarthenshire and Pembrokeshire who may have significant challenges in recruitment.

While the government may say that a significant amount of middle leaders do not apply for headship, therefore there are people in the supply chain, the question of why they do not wish to be headteachers needs to be asked. The answer they given NAHT is down to workload, pay and the impact leadership has on the mental health and wellbeing of leaders.

If we want those with NPQH to move into senior leadership, me must address those key barriers.

Protected leave for school leaders

NAHT has consistently advocated for the School Teacher Pay and Conditions (Wales) Document to have a provision for protected leave for school leaders.

There is no provision for school leaders to have any non-contact time with school, unlike some of the protections afforded to teachers under the 1265 protected time provision.

The lack of such provision for leaders results in high levels of burn-out, with leaders being on call at weekends and during breaks. We know this has an impact on retention and will also have implications for those looking to step into leadership positions and step away from the protection of 1265.

We asked members whether they would support or oppose a proposal for an amount of guaranteed protected leave for school leaders.

Overall, 92% of NAHT Cymru members in Wales would support (either strongly support, or support) this proposal.

69% of members stated they would strongly support a proposal for an amount of guaranteed protected leave for school leaders.

Only 1% stated they would oppose this (strongly or otherwise), but 7% did report that they were not sure or didn't know.

Whilst members are looking for action to deal with what has become a workload and wellbeing crisis for school leaders, they do not believe this is a simple issue and must be dealt with nuance, understanding and respect for the existing terms and conditions of school leaders.

Firstly, members highlighted to us that the introduction of protected leave would not, of itself, reduce workload, which would remain the same and still have to be performed at a later date. A significant effort to reduce school leader workload would therefore be key to improving the wellbeing of members, alongside an opportunity for school leaders to fully disconnect.

Members expressed concerns about staff cover and the funding for this to be done. In many cases, members stated there are insufficient staff to take over key duties. Budget constraints mean that leadership teams are small, making it difficult to delegate responsibilities. Members further reported that proper funding would be required to ensure cover is available, yet school budgets are already overstretched. Without funding, the policy would be unworkable.

Leaders were also concerned with where the line would be for safeguarding and emergencies. Head teachers remain accountable for safeguarding within school at all times. Unexpected incidents such as child protection issues, emergencies, or urgent building maintenance often require their direct involvement.

Most importantly, members expressly stated that an additional condition or protected leave cannot undermine existing rights to holiday, free time and the right to disconnect from work. It must be clear in any policy that this would not mean head teachers and school leaders are available at all other times outside of this time period.

Finally, members report that councils, contractors and other agencies expect headteachers to be available 24/7, including holidays. This lies in what our members feel is a public

misunderstanding about a school leaders role and level of workload, with many assuming that “teachers get long breaks”.

We therefore believe that a condition for some kind of protective leave therefore would need to include a named authority figure to take responsibility. It must be accompanied by structural changes to funding, a cultural shift in expectations from councils, contractors and other agencies and better funding for schools.

Evidence from the Royal Society of Chemistry to the Children, Young People and Education Committee, concerning teacher recruitment and retention in Wales.

6 June 2025

Introduction

1. The Royal Society of Chemistry is an international organisation connecting chemical scientists with each other, with other scientists, and with society as a whole. Founded in 1841 and based in London, UK, we have an international membership of around 50,000. We use the surplus from our global publishing and knowledge business to give thousands of chemical scientists the support and resources required to make vital advances in chemical knowledge. We bring people together to spark new ideas and new partnerships and we support teachers to inspire future generations of scientists.
2. The Royal Society of Chemistry is submitting this evidence because we believe that all students should have an unbroken chain of experts[1] teaching them chemistry content throughout their school education. An excellent chemistry education is vital for the future of the chemical sciences as well as other sectors. It sets the foundations for progression into further learning and the profession and can be a valuable experience for young people regardless of their career aspirations.
3. This response has been informed by our established policy positions, published research and guidance, discussions with the other science learned societies, and members of our wider community of initial teacher education providers and teachers of the sciences in Wales

This submission addresses the following questions set by the Committee's inquiry:

- Barriers to recruitment
- Factors affecting retention
- Impact on learners
- Impact on delivery of educational reforms
- Impact on teachers and the wider workforce
- Addressing recruitment and retention

[1] We use the term 'expert' to describe a teacher with appropriate subject knowledge and pedagogical content knowledge for the curriculum and classes they are required to teach.

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Barriers to recruitment

Recruitment into chemistry ITE:

4. ITE providers in Wales have told us that in recent years chemistry has been the hardest of all the sciences to recruit. In 2023/24 only seven people passed their chemistry PGCE.[2] This is the lowest it has been for at least ten years and was only just over 10% of the chemistry allocation.

Financial barriers

5. The recruitment of chemistry teachers can be more challenging than for many other subjects, in part because teacher salaries do not compare favourably to the earning potential of STEM graduates.[3] Unless teaching is considered a rewarding career option compared with the alternatives available to chemistry graduates, attracting enough suitably knowledgeable new chemistry teachers will be a challenge. At least in the short term, financial incentives to train have the potential to help reduce the chemistry teacher shortages.

6. However, the bursary for chemistry ITE in Wales is probably not enough to be effective. Providers have told us that many potential ITE students, especially career changers with families or other obligations, cannot afford either the full-time or two-year part-time PGCE. Table 1. below shows that for UK students pursuing an English medium chemistry PGCE in Wales, once tuition fees have been deducted, the bursary is only £2,465 for a full-time course. Table 2. shows that even with the Welsh language incentive, the take-home bursary after fees is less than half the equivalent amount that an ITE chemist in England receives.

7. The difference in bursary amount for England compared with Wales means that some potential new teachers are choosing to train in England rather than Wales (especially those who live in the North and East of Wales). Even those who want to have some experience of the Welsh system may still choose to take a course across the border. A PGCE tutor told us that a third-year computer science undergraduate who he had spoken to recently said that he couldn't afford to stay in Wales to do teacher training. Instead, he was planning to go to Manchester where he would receive a higher bursary and still get experience of teaching in Wales which he expected to be able to do through a school placement in North Wales.

8. The same tutor also shared that when he asked a school if they could take a student placement next year, they said they were full up with English university trainees and would prioritise English students over Welsh ITE placements as the English university paid more.

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[2] Education Workforce Council. Initial teacher education (ITE) student results 2023-24. ITE 2023-2024

[3] Worth, J., Tang, S. and Galvis, M. (2022). Assessing the impact of pay and financial incentives in improving shortage subject teacher supply. Slough: NFER https://www.nfer.ac.uk/media/4957/assessing_the_impact_of_pay_and_financial_incentives_in_improving_shortage_of_subject_teacher_supply.pdf

9. The Open University salaried route is gaining popularity, especially in Welsh medium schools. The large difference between the salary on this route and the bursary amount may ultimately impact the sustainability of traditional university PGCE courses, reducing the choice of routes into teaching.

Table 1. Comparison of ITE costs and financial incentives / salary in Wales and England for a UK English language chemistry student in academic year 2025/26.

	Welsh University Route	**Open University Salaried Route**	**English unsalaried route**
Time to complete	1 year	2 years	1 year
Financial incentive / salary	£12,000 incentive - Science	£21,812 salary (subject to pay review)	£29,000 bursary
Tuition fee	£9,535	£0	£9535
Total after tuition fee	£2,465	£21,812 (subject to tax)	£19,465

Table 2. Comparison of ITE costs and financial incentives / salary in Wales and England for a UK Welsh language chemistry student in academic year 2025/26.

	Welsh University Route	**Open University Salaried Route**	**English unsalaried route**
Time to complete	1 year	2 years	1 year
Financial incentive / salary	£12,000 incentive - Science £5,000 incentive - Welsh	£21,812 salary (subject to pay review)	£29,000 bursary
Tuition fee	£9,535	£0	£9535
Total after tuition fee	£7,465	£21,812 (subject to tax)	£19,465

Closure of university chemistry departments

10. The recent closure of chemistry departments at Bangor University and the University of South Wales, leaves Cardiff and Swansea Universities as the only providers of undergraduate chemistry courses in Wales.

11. The resulting “cold spot” for chemistry undergraduate provision in North Wales has reduced the pool of potential trainee chemistry teachers in the area. ITE at Bangor University appears to already be feeling the effects of the undergraduate course closure as they have no chemists on their PGCE programme this academic year.

12. The lack of opportunities for young people to study chemistry near to where they live is also worryingly because research has shown that individuals who live with their parents as undergraduates are more likely to become teachers than their peers who live away from home.[4] Such individuals were also less likely to leave the profession within the first four years of teaching. Although this research used data from England, the findings may well be applicable to Wales.

13. In the longer term, there is risk of a vicious cycle developing, with fewer chemistry graduates available to become the expert chemistry teachers we need to inspire future generations to pursue careers in the chemical sciences (including in teaching roles). The risk is particularly acute for Welsh-medium provision as Bangor allowed undergraduates to study chemistry in Welsh.

Geographical issues and Welsh medium uptake

14. Long travel distances to rural placement schools (especially in North and West Wales) can deter PGCE applicants. The problem is often more pronounced for Welsh-medium placements, especially in remote areas.

Recruitment into chemistry teaching posts:

15. Our annual Science Teaching survey, which captures the views and experiences of science teachers and technicians in the UK and Ireland, has revealed that understaffing is a problem in a considerable proportion of Welsh state-funded secondary schools. In the latest survey from Spring 2025, 40% of respondents reported that they were understaffed for chemistry teachers in their school.[5] This figure was higher than in England and Scotland and is higher than reported in our previous three years of surveys.[6]

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[4] Jerrim, J., (2024) *Why do “home birds” decide to become teachers?* https://ffteducationdatalab.org.uk/2024/09/why-do-home-birds-decide-to-become-teachers/#:~:text=One%20reason%20to%20live%20at,retention%20rates%20amongst%20these%20teachers.

[5] Unpublished data from the Science Teaching Survey 2025 which asked questions of science teachers and technicians across the UK and Republic of Ireland in spring 2025. N = 72, (includes local authority schools and grammar school/selective schools).

[6] The Science Teaching Survey 2024: https://www.rsc.org/policy-evidence-campaigns/chemistry-education/education-reports-surveys-campaigns/the-science-teaching-survey/
The Science Teaching Survey 2023: https://www.rsc.org/policy-evidence-campaigns/chemistry-education/education-reports-surveys-campaigns/the-science-teaching-survey/2023/
The Science Teaching Survey 2022: https://www.rsc.org/policy-evidence-campaigns/chemistry-education/education-reports-surveys-campaigns/the-science-teaching-survey/2022/

16. Teachers in rural and Welsh medium schools have told us that they are finding it especially hard to fill chemistry teacher vacancies. They often receive few or no applications for science teacher posts. A head of science in a Welsh medium school in West Wales likened the situation to “teacher Tetris across the Welsh medium schools”, where movement in one school creates a gap in another.

Factors affecting retention

Factors affecting retention in ITE:

17. The one-year PGCE is demanding, especially for those without strong subject backgrounds and even dedicated students struggle with the pace. The pressure of the course is a significant factor in dropouts and may deter potential applicants.

18. Some of the ITE tutors we spoke to said that post-COVID cohorts had weaker professional habits (e.g., punctuality, resilience), than their pre-COVID counterparts. They suggested that this might be attributed to their disrupted education and limited work experience. Similarly, practical skills of the post-COVID cohorts were reported as underdeveloped due to limited lab experience during their own education.

Factors affecting science teacher retention in secondary schools:

19. Good working conditions are key to retaining the existing teaching workforce in Wales. A significant factor in this is workload as teachers often cite an unsustainable workload as a key reason for leaving or wanting to leave their teaching roles. The Education Workforce Council’s 2021 ‘National Education Workforce Survey’, found that 70% of teachers felt that their workload was unmanageable.[7]

20. Evidence from the teacher surveying organisation, TeacherTapp suggests that student behaviour has overtaken accountability as teachers’ top source of stress. It is also the biggest source of additional workload for teachers and the principal factor, aside from pay, that is making them consider leaving the profession.[8]

21. An experienced chemistry teacher we spoke to recently, when reflecting on poor student behaviour, said: “It is making me want to leave the profession”.

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[7] 2021 National Education Workforce Survey Report https://www.ewc.wales/site/index.php/en/documents-eng/about/workforce-statistics/national-education-workforce-survey-1/451-national-education-workforce-survey-report-2021-1/file

[8] School Surveys, powered by Teacher Tapp, (2024, November). *Behaviour Barometer: Essential insights for leaders* https://zhi5rt9t.sibpages.com/ or https://schoolsweek.co.uk/whats-the-latest-on-behaviour-in-schools/

22. Chemistry trained teachers are often required to teach biology and/or physics. This is likely to increase the time spent on lesson preparation for less experienced teachers and could mean that new science teachers have to cope with particularly high workloads.

Impact on learners

23. In our most recent Science Teaching Survey, 71% of respondents from mainstream state secondary school schools in Wales[9] reported that learning was significantly impacted by understaffing of biology, chemistry and / or physic teachers.

24. High teacher workload is also having an effect on learners. 82% of science teachers in Wales who responded to our survey reported that a lack of non-contact time within the school day, for tasks such as planning, marking and practicing practical work, had a detrimental effect on student outcomes.[10]

25. Teachers have told us that the difficulties they've faced filling chemistry and other science teacher vacancies have led to non-specialists teaching science, including primary-trained teachers and teachers from other subjects, including maths and geography. Shortages can also result in schools relying on supply teachers, especially for key stage 3.

26. Relative differences in teacher shortages between the science disciplines inevitably affects how schools deploy their science teachers. There is a widespread practice of teachers being deployed outside of their 'specialist' science discipline in Wales. This can have a detrimental effect on students as the most effective teachers have deep subject and pedagogical content knowledge.[11] Moreover, passionate expert teachers of chemistry can influence students' decisions to continue their studies in the subject and pursue a STEM related career.

Impact on delivering educational reforms

27. Some of the teachers we spoke to reported that the pressures of high workload and challenging student behaviour left them with little capacity to plan effectively for the new curriculum.

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[9] Unpublished data from the Science Teaching Survey 2025 which asked questions of science teachers and technicians across the UK and Republic of Ireland in spring 2025. N = 51(includes local authority schools and grammar school/selective schools).

[10] The Science Teaching Survey 2024 https://www.rsc.org/policy-evidence-campaigns/chemistry-education/education-reports-surveys-campaigns/the-science-teaching-survey/2024/top-issues-impacting-student-learning-outcomes/#wales

[11] Coe, R., Aloisi, Sutton Trust report (2014) What makes great teaching? Review of the underpinning research. https://www.suttontrust.com/wp-codeentent/uploads/2014/10/What-Makes-Great-Teaching-REPORT.pdf

28. They also said that Additional Learning Needs provision is strained. One teacher told us that they and their colleagues feel ‘overwhelmed’ by the number of students needing support.

Impact on teachers and wider workforce

29. When a school is experiencing teacher shortages, it inevitably puts extra pressure on other staff who have to ‘pick up the slack’. Teachers have told us that overtime this can lead to general low morale with staff feeling unsupported and overburdened.

30. Within the sciences, shortages often result in teachers having to teach outside of their specialist discipline which has the potential to increase workload if teachers must spend additional time developing their own understanding of a topic before teaching it.

Addressing recruitment and retention

Welsh Government should:

31. **Ensure financial incentives for ITE are comparable with England.** To encourage potential new teachers to train in Wales, ITE bursaries or other financial benefits need to be at least as attractive as those in England. Teachers often find their first jobs in their placement schools or near to where they train. This, along with the fact that the education systems in England and Wales are becoming increasingly distinct, means that people who move to England to complete their Initial Teacher Education may choose to stay there.

32. **Reduce teacher workload.** Working excessively long hours is not sustainable for most teachers. Those who feel overworked and are unhappy with their work life balance, are more likely to consider leaving. Welsh Government needs to do more to enable schools to further reduce teachers’ workload, including that associated with poor student behaviour. This will help to retain the existing workforce and by having more teachers who are satisfied in their jobs and advocate for teaching as a career, it will help to promote teaching as an attractive profession for potential new recruits (including the young people they teach).

33. **Invest in a systematic approach to subject-specific professional learning for teachers of the sciences** Teachers need access to quality assured professional development throughout their careers. They should be supported to develop and where appropriate, expand their subject and pedagogical content knowledge to ensure there are enough experts teaching the sciences and address the relative differences in shortages between the disciplines. This includes professional development to help teachers with a background in one science discipline, gradually gain the expertise needed to teach curriculum

content in one or both other school science disciplines.[12] Ongoing professional learning has also been shown to improve teacher retention.[13]

34. **Urgently address the financial sustainability of higher education.** It is well documented that universities in Wales are experiencing considerable financial challenges.[14] To ensure a supply of suitably qualified teachers, chemistry undergraduate and PGCE programmes in Wales must remain viable.

35. **Improve careers guidance about teaching.** Research looking at young people's decisions about whether or not to go into teaching found that many more young people are open to teaching as a career than actually pursue it.[15] Improved careers guidance in schools and universities should be part of the solution to improve recruitment into chemistry teaching. Guidance should portray science teaching as a valued and challenging science career and explain how to become a teacher in Wales.

[12] To facilitate this we support the Institute of Physics recommendations for a systematic approach to subject specific professional development detailed in their 'Subjects matter' report https://www.iop.org/sites/default/files/2020-12/Subjects-Matter-IOP-December-2020.pdf

[13] Education Policy Institute (2020), *Evidence review: The effects of high-quality professional development on teachers and students.* https://epi.org.uk/publications-and-research/effects-high-quality-professional-development/

[14] BBC news article (May 2025) https://www.bbc.co.uk/news/articles/c4geeygge3ro

[15] MacLeod, Emily; (2023) *The status and safety of teaching: A longitudinal study of why some young people in England become teachers, and why others do not. Doctoral thesis* (Ph.D), UCL (University College London). https://discovery.ucl.ac.uk/id/eprint/10178871/

Royal Society of Biology

Royal Society of Biology Response to the Children, Young People and Education Committee Inquiry on Teacher Recruitment and Retention

June 2025

1. Introduction

The Royal Society of Biology (RSB) welcomes the inquiry and is pleased that the Children, Young People and Education Committee is taking forward this important issue. Addressing the challenges of teacher recruitment and retention is essential to the sustainability and quality of science education in Wales, and therefore to the ability to meet growing workforce demands for scientific training and skills, as well as ensuring that the population is equipped with essential scientific understanding for the modern world.

As the leading voice for biology in the UK, RSB is committed to ensuring that all young people benefit from high-quality biology education, delivered by well-supported subject-specialist teachers. Our response is grounded in our education policy priorities (2023–2028) and our broader strategic vision (2025–2030) to strengthen the national voice for biosciences, increase professionalism in education, and support the bioscience workforce.

We are committed to supporting excellent teaching and learning across the UK. In Wales, as well as our focus on teaching in the sciences, we engage with national policy and curriculum developments to ensure that biology education is inclusive, forward-looking, and fit for the future.

2. Barriers to Recruitment

The persistent shortage of specialist science teachers, particularly in biology, chemistry, and physics, poses a significant challenge for the effective delivery of STEM education in Wales. In 2023/24, only 27% of science teacher training places were filled, exacerbating subject-specialist shortages[i].

According to the Wales Annual Education Workforce Statistics (AEWS) 2024[ii], only 7.2% more teachers entered the workforce in 2024 compared to 2020, with new registrants declining year-on-year since 2022. In 2024, there were just 2,514 new school teacher registrants — a drop from 2,767 in 2023. This downward trend signals that recruitment is not keeping pace with attrition, and long-term workforce replenishment is at risk.

While the most recent Education Workforce Statistics provide useful data on teacher entry trends, there are notable limitations in the publicly available data for Initial Teacher Education (ITE) in Wales. According to the Welsh Government HE Statistics Team, data on enrolments in secondary biology ITE courses is available only up to 2021/22. This historic data, published on StatsWales[iii], shows continued low uptake in biology-specific training pathways.

There is also a lack of application-level data and limited granularity on primary-level science teacher training, which hampers deeper analysis of subject-specific recruitment challenges.

Welsh-medium STEM teaching faces additional pressures due to the limited number of Initial Teacher Education (ITE) candidates training to teach science in Welsh, posing a barrier to the Welsh Government's goal of reaching one million Welsh speakers by 2050[iv]. Research from Bangor University[v] highlights gaps in Welsh-medium STEM education, including limited access to resources and a shortage of qualified STEM teachers who can teach through the medium of Welsh. Furthermore, data from Medr and StatsWales confirms that Welsh-medium science ITE remains extremely limited. In 2021/22, enrolments in secondary ITE science subjects taught through the medium of Welsh were very low[vi] , underlining the scale of the challenge in aligning bilingual STEM teaching with national Welsh language goals.

Teachers RSB has interacted with indicate that many trainee teachers in Wales are opting to seek employment in England due to concerns about the future of triple science at GCSE, perceived deficiencies in the WJEC exam board, and the absence of a national curriculum at KS3, leading to inconsistencies in delivery. Teachers have also expressed concerns about the lack of competition between exam boards in Wales, which they feel limits the quality of available qualifications

and teaching resources. ITE providers in England near to the Welsh border that RSB works with report small numbers of Welsh trainees every year, suggesting a continued cross-border flow of early career teachers. This anecdotal evidence is echoed in historical data (from 2016/17) which showed that a significant proportion of ITE graduates from Wales pursued teaching employment in England[vii]. The lack of current evidence presents a barrier to fully understanding workforce mobility and retention post-qualification. More up to date and comprehensive data are required in Wales to fully explore this issue. RSB would be happy to work with the Welsh government to explore such data.

These concerns are exacerbated by national statistics indicating over 40% of science teachers are teaching outside their subject specialism. The AEWS 2024 report does not explicitly define "subject specialism" or "deployment," but these concepts are reflected in the data. Subject specialism is inferred from analyses of whether teachers hold post-A-level qualifications (e.g. degrees or teaching certificates) in the subjects they teach. Deployment is illustrated through data on teachers assigned to teach subjects outside their area of qualification — highlighting patterns of "out-of-field" teaching often driven by staffing needs and subject-specific teacher shortages. Only 56.8% of biology teachers were trained in biology, with 41.0% trained in another subject[viii]. However, the AEWS report does not provide a detailed breakdown of the specific subjects these teachers were originally trained in. More up to date and comprehensive data are required in Wales to fully explore this issue. Broader trends in the UK offer further insight:

- Science teachers often teach outside their specialism: For example, physics graduates might teach biology, and vice versa, often due to shortages in specific science disciplines[ix]
- Teachers from related STEM fields (e.g., maths or computing) are sometimes deployed to teach biology or other sciences, especially in schools with staffing pressures[x]
- Teachers from unrelated disciplines (e.g., humanities or languages) may also be assigned to teach science. This tends to occur in schools facing severe recruitment challenges[xi]

These different types of "out-of-field" teaching have distinct implications. Teachers from closely related disciplines might adapt more easily, but still lack deep subject

expertise. Those from unrelated backgrounds face greater barriers, which may negatively affect the quality of science education and student outcomes.

This subject mismatch severely undermines the quality of STEM education and hampers the implementation of a robust, specialist-led science curriculum.

Whilst the Welsh Government has implemented incentive schemes to attract STEM teachers, particularly for Welsh-medium education, recruitment remains below target[xii,xiii]. The professional status of teachers must be elevated to improve recruitment. RSB supports initiatives that strengthen teacher professional identity, including investment in subject-specific Continuous Professional Development (CPD), mentoring, and improved career progression pathways[xiv].

3. Factors Affecting Retention

Teacher attrition is rising in Wales. In 2024, 2,486 teachers de-registered, accounting for 6.9% of the total workforce, up from 6.2% in 2023. Over the past decade, long-term retention has also declined significantly — only 57.5% of teachers registered in 2014 remained registered in 2024[xv]. These figures show that more than 4 in 10 teachers leave the profession within 10 years, highlighting an urgent need for improved support and retention strategies.

While teacher attrition in Wales (4% annually) is lower than in England (9-10%), retention remains a challenge, particularly in early-career phases. Subject-specific CPD and mentoring are key drivers for retention[xvi]. RSB advocates for structured subject-specific CPD as an entitlement for all teachers, ensuring that at least 50% of professional development focuses on subject knowledge and pedagogy[xvii].

Workload challenges — particularly administrative burdens linked to safeguarding, Special Educational Needs and Disabilities (SEND), and the implementation of new educational reforms — continue to impact teacher wellbeing and contribute to retention issues. While many of the available data on administrative workload come from UK-wide studies rather than Wales-specific research, these findings are likely to reflect similar pressures within the Welsh context. For example, a Department for Education study in England found that teachers spend around two hours per day on administrative tasks, including safeguarding and SEND-related duties[xviii]. Teachers are also increasingly taking on responsibilities traditionally

managed by other services, such as supporting pupil mental health and family issues[xix]. Without addressing these systemic pressures, teacher retention in Wales may remain vulnerable.

Emerging technologies, such as artificial intelligence, present both challenges and opportunities for the profession. In the short term, concerns about academic integrity and the steep learning curve associated with new tools can act as stressors. However, AI also holds significant potential to reduce workload. A recent Teacher Choices project led by NFER and funded by the Education Endowment Foundation (2024) trialled the use of ChatGPT to support KS3 science lesson planning. With appropriate guidance, teachers were able to cut lesson planning time by over 30%, while maintaining quality and relevance[xx,xxi]. Projects like this demonstrate the value of evidence-based approaches to AI integration and could serve as a model for research and funding initiatives in Wales.

UNESCO (2024)[xxii] emphasises that teachers must retain creative agency over where and how AI interacts with students, highlighting that generative AI differs fundamentally from other digital tools due to its ability to mimic human behaviour. This necessitates not only the development of teachers' subject knowledge about AI but also a broader exploration of how AI can enhance curriculum development, classroom management, lesson delivery, and overall pedagogical practice. Supporting teachers in these areas is crucial for both retention and performance.

Wales' 'aims-based' curriculum is particularly well-aligned with this holistic approach, offering flexibility and depth for integrating AI across educational contexts. In biology, for example, there are natural curricular links to AI's role in our physical, social, and environmental health — spanning wearable health devices, AI companions, and environmental modelling tools for biodiversity and water quality. These contemporary topics not only enrich scientific literacy but also provide teachers with engaging content that supports professional autonomy and ongoing development.

This broader framing of AI competency acknowledges that effective AI integration goes beyond curriculum content alone to include ethical considerations, classroom dynamics, and the cultivation of critical digital literacies. Empowering teachers in

these multifaceted ways strengthens their capacity to innovate in teaching while maintaining control over the learning environment.

The Welsh workforce is also aging[xxiii]. Just 3.9% of school teachers are under 25, while over 64% have been teaching for more than 11 years. With only 20.4% of teachers qualifying in the past five years, the pipeline of early-career teachers is alarmingly thin, threatening long-term sustainability, especially in biology and other sciences.

Career changers represent a largely untapped resource in addressing recruitment and retention challenges. Many career changers bring valuable skills from previous roles, including pastoral experience, careers guidance, and management expertise. However, there are currently few dedicated routes into teaching that cater to career changers, and a lack of structured support networks limits their retention. Schools should be encouraged to recognise the distinct contributions of career changers and provide tailored induction and mentoring programmes to facilitate their transition into the profession. According to Welsh Government HE Statistics, data are currently unavailable on the proportion of mid-career changers entering teaching or the career progression of science teachers into leadership roles (Welsh Government correspondence, 2025; Data not held on workload, mid-career entry, or leadership progression). Improved tracking of these pathways would support better design of retention initiatives.

4. School Leadership Recruitment and Retention

The recruitment and retention of school leaders in STEM education require further targeted research. Leadership mentoring, subject-specific leadership CPD, and workload adjustments could enhance retention in senior roles[xxiv]. Furthermore, teachers entering the profession from different backgrounds, including career changers, may not necessarily seek leadership roles but can provide critical subject expertise and stability within departments.

5. Diversity of the Workforce

The teaching workforce in Wales does not fully reflect the diversity of the population, particularly in ethnic and gender representation in STEM subjects[xxv]. The latest workforce data indicate that 92.5% of teachers are White, with only

0.2% identifying as Black and 0.8% as Asian[xxvi]. Although the proportion of teachers declaring a disability has doubled since 2020, it remains at just 1.2%, suggesting further work is needed to foster an inclusive profession.

Research also suggests that minority ethnic teachers often undertake unpaid leadership roles related to diversity and inclusion efforts. Addressing these structural issues requires improved pathways for progression and targeted recruitment initiatives to increase representation[xxvii].

6. Impact on Learners

Staffing shortages, particularly in science, limit student access to specialist teaching, impacting learner outcomes and post-16 STEM participation. These issues are compounded by a significant number of teachers operating outside their subject specialism—meaning they do not hold an undergraduate degree or equivalent qualification in the subject they are teaching. The 2024 data[xxviii] reveal that just 43.8% of physics and 56.8% of biology teachers were trained in their subject, reinforcing a trend that places student learning at risk, particularly in STEM. A 2022 report from Estyn found that science teaching standards vary significantly between schools due to staff shortages[xxix]. A well-supported, diverse teaching workforce is crucial to delivering a curriculum that prepares students for bioscience careers, reinforcing the need for investment in subject-specialist science teachers.

Evidence consistently shows that students make greater progress and achieve higher outcomes when taught by teachers with strong subject knowledge. Subject specialists — teachers who hold a degree or equivalent qualification in the subject they teach — are more likely to use accurate terminology, provide deeper conceptual explanations, and respond confidently to student questions, all of which enhance learning. Research also indicates that the more time students spend with a subject specialist, the better their educational outcomes. In England, Allen and Sims (2018)[xxx], found a clear positive link between subject-specialist teaching and pupil attainment in science, showing that pupils taught by teachers qualified in their subject made greater academic progress than those taught by out-of-field teachers. The negative impact of non-specialist teaching compounds

over time, particularly in cumulative subjects like science and maths, where foundational understanding is critical for later success.

In the US, studies have similarly shown that students taught by out-of-field teachers consistently perform less well. For example, Clotfelter et al. (2007)[xxxi] found that a teacher's qualifications — including subject-specific training — were strongly associated with student achievement, especially in mathematics. Goldhaber and Brewer (2000)[xxxii] reported that students taught by certified teachers in the subject they taught outperformed those whose teachers lacked such credentials.

Recent Australian data reinforce this picture. A 2024 report from the Australian Mathematical Sciences Institute found that mathematics is taught by out-of-field teachers approximately 40% of the time, raising serious concerns about the depth of subject knowledge being delivered in classrooms[xxxiii]. These findings are supported by the Australian Institute for Teaching and School Leadership, whose most recent Australian Teacher Workforce Data reveal that 20% of maths, 29% of technology, and 11% of science teachers lack formal qualifications in their subject area[xxxiv]. This shortage of subject-qualified teachers has been linked to declining student performance and confidence in core STEM subjects, as reported in The Daily Telegraph's 2025 coverage of national teacher shortages[xxxv]. These findings highlight that sustained exposure to teachers with strong subject expertise is not just beneficial but essential — particularly in cumulative disciplines like science and maths, where foundational knowledge underpins future success.

7. Impact on Educational Reforms

The successful implementation of the Curriculum for Wales relies on a stable, well-trained teaching workforce. Workforce shortages pose a barrier to delivering high-quality science education aligned with RSB's Evolving 5–19 Biology: recommendations and framework for 5-19 biology curricula[xxxvi]. Assessment reforms and Additional Learning Needs (ALN) legislation require sufficient teacher training and support. Without adequate staffing and subject-specific training, implementation risks being inconsistent.

8. Addressing Recruitment and Retention Challenges

RSB recommends the following actions to ensure a sustainable STEM teaching workforce:

A. Strengthening Initial Teacher Education (ITE) and Subject-Specific Training

- Ensure all ITE trainees receive subject-specific training and mentoring.
- Expand financial incentives for science graduates entering teaching.
- Create flexible pathways for career changers to enter teaching, including structured induction and support networks.
- Use subject-specific workforce data to track and address subject-specific deployment mismatches, ensuring that teachers are supported to teach within their area of expertise and not routinely assigned outside their specialism.

B. Enhancing Subject-Specific CPD and Career Progression

- Establish a national CPD entitlement for science teachers, ensuring at least 50% of professional development is subject-specific.
- Improve mid-career subject-specialist CPD opportunities, supporting retention and career development.
- Develop a national reporting mechanism to track the alignment of teacher training and deployment across subject areas, using the data to inform targeted support and CPD provision in subjects like biology where mismatch is pronounced.

C. Supporting Early-Career Teachers

- Deploy subject-specific mentors for all early-career secondary teachers.
- Reduce workload burden by ensuring new teachers are not over allocated across multiple year groups and subjects.

D. Strengthening Leadership Pathways in STEM

- Provide targeted leadership training for STEM subject leaders and mentors.

- Recognise the importance of subject leadership within school leadership structures.

E. Improving Workforce Diversity and Inclusion

- Develop targeted recruitment initiatives to improve ethnic and gender diversity in STEM teaching.
- Ensure structured career progression pathways to support underrepresented groups.

F. Leveraging AI and Digital Tools in Science Education

- Support structured AI training to help teachers integrate technology effectively and reduce administrative burden.
- Explore the use of digital tools, such as VR simulations, to enhance biology education, driven by research and evidence.

9. Conclusion

The Royal Society of Biology urges the Committee to prioritise subject-specialist recruitment, targeted retention initiatives, and enhanced subject-specific professional development to address ongoing workforce challenges. A stable and well-supported teaching workforce is essential for delivering high-quality science education, supporting the Curriculum for Wales, and preparing students for future bioscience careers.

The latest education workforce statistics reinforce the urgency of these recommendations. Declining long-term retention, reduced new entrant numbers, and widespread teaching out-of-specialism highlight systemic vulnerabilities. These must be addressed to sustain and enhance the delivery of high-quality, inclusive biology education aligned with the ambitions of the Curriculum for Wales.

A resilient, subject-specialist teaching workforce, supported by strategic investment and collaboration, is essential to securing equitable, high-quality biology education that equips all learners for successful futures in bioscience.

RSB are keen to work with the Welsh Government, the Committee and the Clerk to interrogate the data further, and to support the development of informed recommendations and commentary. We welcome this inquiry and look forward to the Committee's recommendations.

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Institute of Physics' response to the Children, Young People and Education inquiry on teacher recruitment and retention.

Introduction

The Institute of Physics (IOP) is the professional body and learned society for physics in the UK and Ireland, representing 21,000 members. It seeks to raise public awareness and understanding of physics, inspire people to develop their knowledge, understanding and enjoyment of physics and support development of a diverse and inclusive physics community. As a charity, it has a mission to ensure that physics delivers on its exceptional potential to benefit society.

The challenges physics education in Wales faces is stark. From a serious lack of physics specialist teacher recruitment to poor attainment for learners in the sciences. Our consultation response is effectively calling for a reset in how Wales approaches teacher recruitment, retention and retraining.

Physics benefits us all. It provides essential skills and knowledge that we will depend upon ever more in years to come. Physics is not just the source of inventions and ideas, but also how the country's economic health can be secured. Wales has an established research and development base, representing both employment and growth opportunities, but likely held back by significant issues in the education and skills system.

Our response to the inquiry covers a number of policies but most of all highlights the need for policymakers to view this opportunity as a reset and a chance to reinvigorate pathways into teaching, strengthening the teaching career itself and finding new methods on attracting physics talent to take up a career teaching their subject in Wales.

Policy recommendations

Recruitment

1. Call on the Welsh Government to increase the Subject Priority Incentive Scheme bursary from £15,000 to match England's equivalent of £29,000. Novel approaches such as reducing student debt or paying down PGCE costs tied to the number of years in teaching should be considered too.

2. Call on the Welsh Government to establish a newly created STEM Teaching Centre for Excellence. This would place a strong focus on recruiting from universities and supporting students on ITE courses with tailored tutoring.

3. Call on the Welsh Government, local authorities and schools to recruit physics specialists as Physics Teachers with the expectation that most of their teaching will be done in their specialism. Recruiting physics teachers as general Science Teachers, with the expectation that they teach across all science disciplines

fails to utilise their specialism. This approach likely deters talented physics and astronomy graduates from entering the teaching profession. Demanding that teachers in the sciences teach outside of their specialism is a recurring issue identified throughout this response.

4. Call on the Welsh Government to introduce pre-ITE Subject Knowledge Enhancement courses for non-physics graduates to train as a physics specialist.

Retraining

5. Call on the Welsh Government to introduce a retraining course for established teachers of the other sciences to become in-field physics teachers. In our response we have proposed a route such as Subject Knowledge for Physics Teacher courses.

   To help with the above recommendation, the Children, Young People and Education Committee should find out more from the Dublin City University Professional Diploma in Teaching Physics (PDTP) course to understand what the potential could be for a government funded physics teacher upskilling centre.[1] If the Committee could visit the site, it could compare this model to the current provision in Wales. Please contact us at the Institute of Physics and we can put you in contact with PDPT lead at Dublin City University.

Retention

6. The Committee should call on the Welsh Government and education providers to ensure that physics-specialists teach within their specialism. This would be instead of teaching all three disciplines in the sciences, two of which they may have no specific expertise in.

7. Call on the Welsh Government to work with schools and place greater emphasis on teacher Continuous Professional Development (CPD) and the pedagogy of physics education. Ensuring that teachers have the capacity and time to access CPD is important.

8. Call on the Welsh Government to work with the school sector and introduce a greater degree of flexibility to the profession to help make it competitive with other industries and professions that physics graduates may consider entering.

A note on our response:

The challenges the education sector in Wales faces are deep, diverse and complex. Issues ranging from pay, to workload, pupil behaviour, flexible working opportunities,

[1] Dublin City University. 2025. Professional Diploma in Teaching Physics. DCU: Online.

other industries competing for talent and changing expectations placed on teachers are among a myriad of reasons affecting teacher recruitment and retention. Physics is one of the worst hit subjects in Wales in terms of teacher shortages. Our policy recommendations proposed in this consultation response could also be used to help other disciplines facing shortages. Addressing these long-standing challenges in teacher recruitment, retention and retraining, which have arisen from a series of complex systemic factors will require a holistic response requiring the use of multiple policy levers.

Current state of play of Wales' physics teacher workforce

In 2024, Wales had fewer physics-trained teachers (174) than secondary schools (205).[2] [3] For 2023/24, seven specialist physics teachers qualified through Wales' Initial Teacher Education system from an intake of 10.[4] The intake allocation target was 67, meaning the intake fell 86% short of the target.[5] The intake allocation target has since been increased to 72. It is unlikely to be reached. 58% of secondary schools considered themselves understaffed for physics teachers in 2022.[6] This was much higher than any other nation in the UK. Wales also achieved its lowest ever Programme for International Student Assessment (PISA) score in science in 2022.[7] In 2024, only 43.8% of those teaching physics in secondary schools were trained in the subject and available data indicate no more than 50% has trained in the subject since 2014.

From the data available, we are unable to identify which schools have specialist physics teachers and which do not. Of the teachers who deliver physics education in Wales, it is difficult to work out which are specialists in the subject, and which are not on a local authority basis. Specialism is self-reported so the number of physics teachers in Wales is higher than the number of those who are physics specialists. We have defined specialism as being trained in the subject.

Number of registered school teachers employed by subject taught versus trained 2024:[8]

[2] Education Workforce Council. 2024. Annual Education Workforce Statistics for Wales 2024. Cardiff: Education Workforce Council.
[3] Welsh Government. 2024. Schools' census results: January 2024. Cardiff: Welsh Government.
[4] Education Workforce Council. 2024. Initial teacher education (ITE) student results. Cardiff: Education Workforce Council.
[5] Education Workforce Council. 2025. Initial teacher education (ITE) intake allocations. Cardiff: Education Workforce Council.
[6] Royal Society of Chemistry. 2022. The science teaching survey 2022. Online: Royal Society of Chemistry.
[7] Senedd Research. 2023. How did Wales perform in PISA 2022? Cardiff. Senedd Research.
[8] Education Workforce Council. 2024. Annual Education Workforce Statistics for Wales 2024. Cardiff: Education Workforce Council.

Subject	No. trained in subject	%	No. trained in another subject	%	No. unknown	%
Physics	174	43.8%	215	54.2%	8	2%
Biology	310	56.8%	224	41%	12	2.2%
Chemistry	234	48.6%	235	48.9%	12	2.5%
Science	442	36.9%	727	60.7%	28	2.3%

Number of registered secondary school teachers by initial teacher education subject trained 2024:

Subject	Number
Physics	290
Biology	670
Chemistry	473
Combined/General Science	814

We do not really know why the number of teachers trained in Physics ITE (290) is higher than the number of physics teachers trained in the subject (174). The data from Education Workforce Council is gathered from the Register, which teachers self-report their profession and education into. This can generate results leading to some inconsistencies in cross comparisons.

Number of registered secondary school teachers by subject taught (the number of teachers delivering education within a given subject) 2024:

Subject	Number
Physics	397
Biology	546
Chemistry	481
Combined/General Science	1,198

StatsWales also tells us that physics has one of the lowest rates of specialist teachers out of all subjects. It takes around 400 teachers to deliver the equivalent of what 155 full-time physics teachers could, meaning many of the teachers teaching physics are spread thinly across other subjects.[9]

Our response to the inquiry's terms of reference:

1. **Barriers to recruitment: Intake into ITE and factors impacting recruitment into post (including a focus on priority subjects, Welsh medium, secondary schools and the impact of Wales' educational reforms on teacher recruitment).**

[9] StatsWales. 2024. Teachers by measure (headcount, full-person equivalent (FPE) and hours) and subjects taught. Cardiff: Welsh Government.

The recruitment of physics-specialist teachers in Wales is in a downwards spiral and is driving down physics participation in education. This threatens to shrink the future physics teaching workforce and entrench a downward spiral in which fewer and fewer people participate in physics education as both students and as teachers. Our response to the committee's inquiry on *Routes into post-16 education and training* highlights the vicious cycle effect physics is experiencing in Wales.[10] Policy interventions are needed now to redress and then strengthen the physics teacher workforce in Wales.

Namely, more students have a low-quality experience of physics at school, which contributes to fewer students taking an active interest in physics and pursuing it at post-16. This leads to fewer physics undergraduates and therefore fewer physics graduates entering the workforce; resulting in fewer potential physics teachers causing the number of physics teachers to drop again; resulting in more students getting a low-quality experience of physics; and so on in a downward spiral.

As the number of physics roles in the UK already outnumber physics graduates, this leads to increased market competition for the few graduates that come through the system. Teaching in Wales is impacted by this negative cycle and is attracting very few physics graduates to the profession leading to fewer physics teachers overall.

Policy interventions are needed to break this cycle, and we have outlined a series of policy proposals in section 1 which we encourage the committee to endorse and propose to the Welsh Government.

Education Quality

Whilst the numbers in teacher recruitment are particularly poor, the IOP is also concerned that without improving the ITE experience and better supporting prospective teachers to be the best they can be, the benefits of any improvement in teacher recruitment will be short lived. Without a strong pool of candidates to choose from schools cannot be expected to address issues in recruitment. The efforts to improve teaching quality begin when ITE centres recruit their intake and continue for the duration of a teachers' career. It does not just begin and end in a single year of ITE. The IOP has a series of policy proposals designed to improve teaching quality from ITE level through to teachers who are in their early career and beyond.

The issue of teaching quality – arising in large part due to systemic failings across the education system - may be a contributory factor to Wales' poor science PISA results. These results sit below the rest of the UK and OECD average. The Institute for Fiscal Studies said that "the lower scores in Wales cannot be explained by higher levels of poverty. In PISA, disadvantaged children in England score about 30 points higher on average, than disadvantaged children in Wales. Even more remarkably, the

[10] Institute of Physics. 2025. Routes into post-16 education and training: Written evidence to the Senedd. Senedd: Online. p. 2.

performance of disadvantaged children in England is either above or similar to the average for all children in Wales."[11] This suggests there are factors beyond socio-economic explanations affecting outcomes and educational participation in Wales.[12]

Secondary schools across Wales are struggling to recruit teachers, especially into shortage subjects such as physics (although, schools are increasingly recruiting 'science teachers' rather than 'physics teachers'). Estyn has noted that whilst teacher retention can always be improved, it is relatively stable in Wales across the board. However, even a stable attrition rate is an issue for a shortage subject like physics. Teacher recruitment is in a very poor place. Since 2014, the number of students on secondary ITE programmes has declined by nearly a half. Whereas for physics, the number of students on ITE physics programmes has generally been low since 2014.[13]

For recruitment into schools, the average number of applicants per vacancy across all subjects has more than halved since 2011. For physics it has dropped from around 10 applicants per vacancy in 2011 to 3 in 2023. For science, it has dropped from 12.5 in 2011 to 3.9 in 2023.[14] [15] As this is an average, some schools may even be getting no applicants. From the data it appears that since 2011, schools have placed an increased emphasis on recruiting into science rather than physics, most likely because of the shortage of candidates. Recruiting into science widens the potential pool of candidates for schools despite this having a likely negative impact on the quality of students' learning of physics and also on recruitment in the long-term.[16]

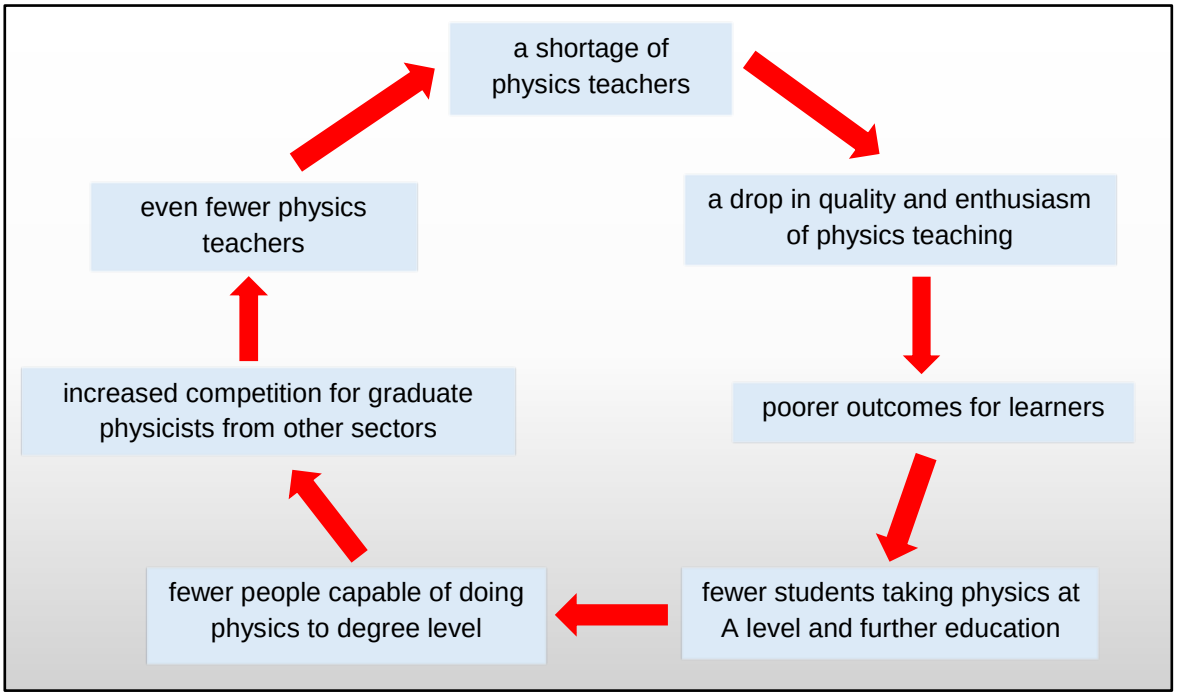
Estyn said that headteachers in secondary schools told them that in recent times, the quality of candidates is too often not up to the required standard.[17] This is particularly concerning. Even when people have successfully completed their ITE and become NQTs, not all go on to successfully secure actual teaching roles, despite the huge shortages. This points to a wider issue in the teacher training system where time and money is being spent on training a teaching workforce, some of which are then unable to enter the workforce (or even if they do, they are not equipped to provide the quality of teaching that young people deserve).

Considering this, schools face the choice of either not recruiting into shortage subjects or recruiting candidates who may not have the knowledge or skills they need to provide a high quality of education to their pupils. This issue of quality must be addressed

[11] Institute for Fiscal Studies. 2024. Major challenges for education in Wales. Institute for Fiscal Studies: Education Policy Institute. P. 3
[12] Education Policy Institute. 2024. Post-16 education across the UK nations: Participation and attainment. EPI: Online. p. 92.
[13] Education Workforce Council. 2025. Initial teacher education student results. EWC: Online.
[14] Welsh Government. 2024. Teacher recruitment: number of applications received by subject and year. StatsWales: Online.
[15] Welsh Government. 2024. Teacher recruitment: number of posts advertised by subject and year. StatsWales: Online.
[16] See section on: Recruit into specialism.
[17] Estyn. 2024. Cross-cutting themes: recruitment and retention. Estyn Annual Report 2023–2024: Online.

alongside policies to increase recruitment to give learners the highest quality of education. High-quality teaching boosts attainment and can inspire learners to progress into post-16 study in the sciences.[18] At GCSE level this boost in attainment, even if only small, can have dramatic effects on an individual's lifetime earnings.[19]

The cycle of physics-specialist teacher shortages and its systemic impact



The bursary

Policy recommendation: The Committee should call on the Welsh Government to match the existing ITE Priority Subject Incentive Scheme bursary of £15,000 to England's £29,000 with a no detriment policy, matching the Welsh Government's approach to teacher pay rises. In addition, it could look to pilot novel financial schemes focussing on teacher retention – such as student loan debt repayments. Consideration should also be given to the development of a subject priority scholarship scheme similar to what is run by the Department for Education.[20]

Research in England found that bursary increases are associated with increases in recruitment into ITE.[21] The report found that bursary increases tend to lead to more people entering teaching training, staying on as teachers beyond their fifth year and

[18] Van den Brande, J and Zuccollo, J. 2021. The effects of high-quality professional development on teachers and students: A cost-benefit analysis. Wellcome: Education Policy Institute.
[19] Hodge, L et al. 2021. GCSE attainment and lifetime earnings research report. UK Government: Department for Education.
[20] Department for Education. 2024. Funding: initial teacher training (ITT), academic year 2024 to 2025. GOV.UK: Online.
[21] Dawson, S., Tang, S. and Worth, J. 2023. The impact of training bursaries on teacher recruitment and retention: an evaluation of impact and value for money. Slough: NFER

that this extra supply of teachers tend to take places in schools in disadvantaged communities.

However, the report is for England only where the bursary payments are at a much higher level than Wales' ITE Priority Subject Incentive Scheme. All things being equal, a physics student who, unless is eligible for the Ethnic Minority Initial Teacher Education bursary or the Welsh medium in ITE bursary (who are eligible for additional payments) could expect to receive a £29,000 bursary in England compared to £15,000 in Wales.[22] [23] The bursary in England has also increased in recent years whereas the bursary in Wales has remained static at £15,000 since 2022 (however it has been at a similar level since its introduction in 2017).[24] It would be interesting to understand any impact the bursary in England has on students in Wales doing their teacher training in England – particularly amongst border areas such as Newport and Wrexham where commuting to a university in England is relatively easy.

In Wales 3 students passed their physics ITE course in 2022/23 (with 1 deferring) which suggests the intake was 93% short of the intake allocation target of 58.[25] For 2023/24, 7 students passed their physics ITE (with 3 not passing), falling 85% short of the intake allocation target of 67.[26] ITE data is not available for 2024/25, but the intake allocation is 67 and for 2025/26 the intake allocation target is 72.[27] Both are unlikely to be met.

England's more generous bursary is likely to be a contributory factor to the level of recruitment they are able to achieve, albeit, still falling well short of their target. Broadly speaking, the greater the bursary, the higher the response, within reasonable limits.[28] Bringing Wales' bursary in line with England's could help mitigate some of the potential cross border impact that a higher bursary in England may currently have on Wales.

Crucially, bursary spending is targeted at priority subjects, so offers better value for money compared to undifferentiated spending on all phases and subjects, such as across-the-board pay. Bursary spending is also targeted at prospective teachers, whose behaviour tends to be more responsive to financial incentives compared to experienced teachers. Bursaries can be cost effective compared to other targeted policy measures such as early career payments.

However, we do know that new teachers are not driven principally by financial incentives. Financial incentives are one of many levers that can help boost recruitment.

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[22] Department for Education. 2024. Funding: initial teacher training (ITT), academic year 2025 to 2026. Online: UK Government.
[23] Welsh Government. 2024. Initial Teacher Education (ITE) Priority Subject Incentive: guidance for students 2024 to 2025. Online: Welsh Government.
[24] Welsh Government. 2024. Initial Teacher Education (ITE) Priority Subject Incentive Scheme: guidance for students. Welsh Government: Online.
[25] Education Workforce Council. 2023. ITE student results 2022-2023. EWC: Online. p. 5.
[26] Education Workforce Council. 2024. ITE student results 2023-2024. EWC: Online. p. 7.
[27] Education Workforce Council. 2025. Initial teacher education (ITE) intake allocations. EWC: Online.
[28]

We also know that teachers are often driven by intrinsic motivations such as making a difference, having a passion for their subject and viewing teaching as a vocation. Welsh Government-commissioned research supports this view, but it also recognised that well-calibrated bursaries could play a valuable role in boosting ITE recruitment.[29]

Whilst evidence shows that bursary payments play a role in ITE recruitment, it is also understood to play a lesser role in teacher retention. Beyond bursary payments, the Welsh Government could test novel financial incentives that could encourage newly qualified teachers to remain in the teaching profession.

The teacher shortage means that, while the state is struggling to fill teacher roles in shortage subjects, it is wider society that is suffering as a result. However, the costs attached to filling this gap in the states' capacity are more or less placed on the individuals most qualified and willing to do so. Individuals will graduate with a degree in physics, most likely with a debt through Student Finance, and are then expected to take on further debt to do a PGCE. Therefore, policy and financial interventions to reduce the costs of either or both of these debts could prove beneficial – especially if down payments of the debts are linked to length of service as a teacher.

STEM Teaching Centre for Excellence

Policy recommendation: The Committee should call on the Welsh Government to establish a STEM Teaching Centre for Excellence, led by a full-time funded Chair and embedded within an existing ITE institution, to help boost the quality of ITE in Wales. The STEM Teaching Centre for Excellence would have cross-curricula impact and would also run off-site activity to support recruitment and tuition in all ITE centres in Wales.

The Initial Teacher Education (ITE) system is not recruiting or producing enough high-quality teachers for recruitment and is therefore unable to fill the shortages schools are facing.[30] The policy proposal also addresses the importance of fostering cross-curricular working through STEM amongst teachers throughout their careers, whilst also supporting them to encourage their pupils to develop an understanding of the distinctive nature of the subject disciplines. For example, a students' maths skills would help them in physics, but learners must also be aware of the distinctive nature of disciplines in STEM, such as the distinction between biology, chemistry and physics.

In addition, some physics graduates may not perceive becoming a physics teacher as a high-quality profession compared with other industries they could enter. [31]

[29] Beaufort Research and National Foundation for Educational Research. 2019. Research Study on the Attractiveness of Teaching, and Retention of Teachers. Cardiff: Welsh Government.
[30] Estyn. 2024. Cross-cutting themes: recruitment and retention. Estyn Annual Report 2023–2024: Online.
[31] Institute for Fiscal Studies. 2018. The characteristics of and earnings and outcomes for physics teachers. Gatsby: Online.

Addressing this issue, combined with a series of other policy proposals, could help increase the number of quality candidates on offer to schools. This would help boost recruitment and raise standards in physics education for learners.

Wales does not have a national body of this scale focussed on STEM in education. The current offer compared to elsewhere across the UK and Ireland is poor. Physics graduates will want to join a profession that is cutting-edge, well respected and well compensated. Sadly, Wales loses out to the rest of the UK on this basis. For example, a prospective teacher from Wales may have a choice between accepting a £15,000 bursary and a part-time PGCE tutor in Wales, or a £29,000 bursary and a physics PGCE course led by leading subject academics in England.

A recent OECD report said teachers need a strong foundation in training and early-career induction through a solid foundation in ITE. It said this would give teaching a professional identity, making the career more attractive.[32] The STEM Teaching Centre for Excellence could be a practical way to deliver this vision.

Failing to make teaching attractive as a career reduces the number of prospective teachers which, in turn drives, down the quality of education learners experience.

To address this, the IOP proposes that the Welsh Government should establish a STEM Teaching Centre for Excellence. This Centre would aim to:

- enhance the quality of ITE and therefore the teaching of STEM subjects at secondary school.
- support the professionalisation of teaching through quality tutoring, mentoring and ITE course content.
- take a lead role in working with undergraduate departments of physics, astronomy and engineering (and other STEM subjects) in Wales and universities across the UK with Welsh domiciled students to market teaching to prospective students.
- as a centre for excellence, demonstrate to Welsh domiciled students that teaching in Wales is valued and draws investment.
- increase the number of prospective teachers in secondary schools and further education through increasing the number of ITE students. This would be done through linking up with undergraduate courses.

The Centre, whilst not an awarding body itself, would support Postgraduate Certificate in Education (PGCE) and Post-Compulsory Education and Training (PCET). The delivery mechanism is important. It needs to be funded with full-time roles with activity

[32] OECD. 2025. Constructing Scenarios for the Future of Teaching in Wales. OECD: Online. pp. 76-84.

and content delivered from within the centre, rather than relying on ad-hoc participation from external organisations.

A STEM Teaching Centre for Excellence would:

- Act as a standalone institution and contain two core functions:
    - Research – into STEM pedagogy and the STEM teacher workforce pipeline.
    - Off-site activity – staff members would help embed the Centre's research into practice, both through establishing links with undergraduates to working across ITE institutions across Wales and helping with tutoring, school induction and mentoring.

  The Centre would be unique in that it would carry out both functions. Notably, its outreach work forms a core part of the offer. It should be a delivery mechanism in and of itself which makes it distinct compared to organisations which may specialise in education research only. The fact the Centre would work alongside the ITE system makes it uniquely capable in supporting ITE institutions and helping solve their problems.
- Be led by a funded full-time, internationally recognised, Chair (senior academic) who would lead on pedagogy research into improving STEM teaching across the new curriculum. The Centre would then have an important role in translating its own and international research into practice by supporting ITE tutors, schools, teachers and students.
- The Chair would be supported by a team to ensure high quality PGCE courses in Wales, high quality retraining courses in Wales, support (through professional learning) to implement the new curriculum. Such resourcing is essential to ensure this is a fully functional and effective delivery arm.
- Assist in collaboration across Wales' education sector, linking up undergraduate students to ITE courses and ironing out the patchy provision of tutoring, mentoring and the induction process into schools.
- Provide targeted support for ITE centres, ensuring that its students are supported by quality tutoring and research into STEM pedagogy.
- Enhance teacher retention and professional development by offering structured tutoring, pedagogical training, and career guidance.
- Professionalise physics teaching and offer an intellectually challenging career to physics graduates through supporting physics specialist teaching which allows individuals to grapple with the 'big ideas' in physics education and the methods that can be used to teach this.

- Encourage discussions and debate around the teaching of topics such as energy, for example, and how learners may conceptualise and understand it. The Centre would play an important role in allowing teachers to specialise in their field and engage in the questions and debates in their subject. Supporting teachers in these discussions on areas such as energy would enhance Wales' reputation as an innovative green economy where more opportunities are available to individuals.
- Be able to play a further role if implementation is successful, such as supporting summer school placements for prospective ITE students/NQTs.

Additional benefits if implementation is successful:

- Act as a funding hub for programmes such Subject Knowledge Enhancement (SKE) courses (both pre-ITE and in-service). The Centre could convene courses and training (continuous professional development) for teachers in the workforce, particularly those who are newly qualified teachers and within their first five years in the profession. This would provide professional training beyond the one-year ITE course and act as a core retention policy.

Welsh language provision

We know that recruiting for Welsh language teachers is a challenge for schools and the shortages in physics teaching compounds the problem for Welsh language schools. Recruitment is a significant challenge for Welsh medium physics provision. To make matters worse, only 2 of the 4 ITE centres that provide physics ITE have a Welsh language tutor.

As of 2023/24 there are 205 secondary schools in Wales. 55 are Welsh medium or bilingual, 8 are English medium with significant use of Welsh and the remaining 142 are English medium.[33]

The STEM Centre for Teaching Excellence should aim to function alongside and in cooperation with Welsh Government policy. This includes working with the National Institute for Learning Welsh as set out in the Welsh Language and Education (Wales) Bill and the new national professional learning and leadership body.[34] [35] This should be done to address the shortages in Welsh medium provision and assist with developing the language skills of physics teachers who wish to teach in Welsh.

Recruit into specialism

[33] StatsWales. 2024. Schools by Assembly constituency and Welsh medium type. Welsh Government: Online.
[34] Welsh Government. 2025. Welsh Language and Education (Wales) Bill: Explanatory Memorandum. Cardiff: Senedd Cymru. Part 5.
[35] Welsh Government. 2025. Written Statement: School Improvement Partnership Programme – Progress Update. Welsh Government: Online.

Policy recommendation: The Committee should recommend to Welsh Government, local authorities and schools to recruit physics specialists as Physics Teachers and not Science Teachers (likewise for biology and chemistry). Ensure that timetabling in schools splits subjects by biology, chemistry and physics rather than retaining them under the science header. Similarly, physics specialists may instead be more interested in teaching physics + maths, physics + ICT, physics + DT rather than physics, biology and chemistry.

Recruit physics specialists as Physics Teachers with the expectation that most of their teaching will be done in their specialism. Recruiting physics teachers as science teachers with the expectation they teach across the sciences and in other subjects does not utilise their specialism and skills and squanders valuable resources.

Physics specialists are often recruited by schools as 'science teachers' with an expectation to teach across the sciences in all disciplines: biology, chemistry and physics. This adds to their workload: they have no repeat lessons in a week so have to prepare many distinct lesson plans; and they have to prepare for three subjects, two of which they may not have studied since they were 16 and are outside of their specialism. This approach does not utilise the strengths of physics specialists for the benefit of learners. Allowing physics specialists to stay within their specialism could help both with retention and driving up the quality of education learners receive.

This would also help improve the data on the teacher workforce. Currently, any teacher who teaches physics at secondary school can report themselves as a physics teacher, regardless of whether they are trained in the subject beyond post-16 or not. This makes it extremely difficult to identify which schools have physics specialists and which do not. A move away from science and towards recognising biology, chemistry and physics as distinct disciplines could help with data collection and a better understanding of Wales' teaching workforce.

2. Factors affecting retention: (including a focus on priority subjects, Welsh medium, secondary schools and the effectiveness of early career support).

Coaching and CPD

The Welsh Government has made significant steps to support the retention of teachers of priority subjects. The IOP welcomes the Welsh Government's move to fund the Institute of Physics' coaching work to teachers on a three-year basis.[36] [37] [38] This forms part of the Boosting Science Education in Wales fund from Welsh Government and will be delivered in partnership with the Royal Society of Chemistry and Science Made Simple, focussing on the provision of continuous professional development (CPD).

[36] Welsh Government. 2025. Written Statement: Awarding of Curriculum for Wales grant support programme. Welsh Government: Online.
[37] Welsh Government. 2025. The Curriculum for Wales grant support programme: grant awards: Boosting science education in Wales. Welsh Government: Online.
[38] Institute of Physics. 2025. Boosting science education in Wales. IOP: Online.

This fund will help boost practitioners' pedagogical and subject knowledge, as well as build confidence. Coaching and CPD play a vital role in upskilling teachers, helping with lesson and curriculum plans and providing a network for teachers of the sciences in Wales to exchange knowledge and ideas – such as through the IOP's annual teacher conference delivered online and in Brecon.

CPD supports teachers who are already in the education system with enhanced training to upskill their science pedagogical methods. CPD can help ameliorate teacher attrition rates by helping teachers feel supported in schools. However, we know many teachers struggle to access the CPD on offer as they are unable to take time out of school to go on these training days. Teachers should not be expected to do CPD out of work hours so time and funding should be made available to schools for their teachers to attend CPD sessions.

The IOP's coaching work has had a considerable positive impact on the sciences more broadly as many teachers in the sciences are expected to teach across the specialisms of biology, chemistry and physics. For example, a biology teacher may have studied biology at degree level but may have stopped studying physics after GCSE. This could mean GCSE students are learning physics from someone who only studied physics up to GCSE level. This has obvious implications on the potential impact of physics teaching quality compared a teacher who is a physics specialist.

Ensuring that new physics teachers are supported in their early career, have access to CPD within work hours, have support in curriculum design and are able to teach within their specialism as much as possible will help with job satisfaction and retain physics-specialist teachers in their roles.[39] Ensuring that teachers are given the opportunity to train and upskill all throughout their career is extremely important. We cannot expect all teacher training to take place within a single year of ITE alone. The report *A Future Teaching Profession for Wales* highlighted this point well.[40] The report also highlighted key issues such as job flexibility and the ability to work from home and/or part time.

Subject Knowledge Enhancement and retraining

Policy recommendation i: For recruitment, the Committee should call on the Welsh Government to provide pathways and funding for non-specialist physics teachers to take accredited and fully funded Subject Knowledge Enhancement (before their PGCE).

Policy recommendation ii: On retraining, the Committee should call on the Welsh Government to provide pathways into Subject Knowledge for Physics Teacher courses

[39] Whalley, M. and Horsewell, I. 2024. Should I stay or should I go? Exploring the experiences of physics teachers in their first five years. SSR in Depth, 105(391), pp, 7.
[40] Egan, D et al. 2025. A Future Teaching Profession for Wales. Cardiff Metropolitan University: Online.

(for in-service teachers). Upon completion, they should be recognised as physics specialist teachers.

To support the recommendation ii, the Children, Young People and Education Committee should find out more from the Dublin City University Professional Diploma in Teaching Physics (PDTP) course to understand what the potential could be for a government funded physics/STEM teacher pedagogical and subject knowledge centre.[41]

Many graduates, who do not have any post-18 experience of physics, can make excellent physics teachers. However, giving them the pedagogical content knowledge (the 'know how' of teaching a subject) and the subject content knowledge (the what to teach related to syllabus etc), does require some form of retraining. Graduates could undertake a Pre-ITE Subject Knowledge Enhancement training course – preferably 24 weeks long. Or new physics teachers could be developed by retraining an in-service teacher of one of the other sciences.

Subject Knowledge Enhancement (SKE) courses have historically helped graduates in other subjects gain the necessary subject knowledge and pedagogical skills.[42] These programmes were highly valued for their structured, long-term approach and the support they provided through peer networks and expert facilitators.

Another effective solution is the use of intensive in-service retraining courses such as a Subject Knowledge for Physics Teaching (SKPT) course (which comprises 20 days of instruction across a year). Retraining an existing teacher is more cost efficient than training and recruiting new teachers – however, both levers should be used. IOP calculations for England suggests retraining a teacher for physics is a quarter of the cost of training and recruiting a new specialist teacher.

This retraining service could borrow elements of the SKPT course in England that was piloted by IOP and is currently delivered by The Ogden Trust.[43] In addition, it could utilise the current Welsh Government funded IOP coaching network, other learned societies such as the Royal Society of Chemistry and the STEM Teaching Centre for Excellence for course design and delivery. SKPT needs to be targeted at schools that do not currently have a sufficiency of specialist physics teachers – thereby generating a new physics teacher exactly where they are most needed. It must be fully funded to allow schools to release teachers for some time every week over a whole year. IOP's coaching network is well placed to identify which schools would benefit from this.

The funding needs to cover the re-training cost itself and to include sufficient financial incentive to schools and/or teachers to participate, or for teachers to complete all of

[41] Dublin City University. 2025. Professional Diploma in Teaching Physics. DCU: Online.
[42] E, Perry et al. 2024. A Scoping Study into the Long-term Impacts of Additional Subject Specialism Professional Development. Sheffield Hallam University Research Archive: Online.
[43] The Ogden Trust. 2025. Subject Knowledge for Physics Teaching. The Ogden Trust: Online.

the modules of the course (using their own time or the school's time and supported through the provision of a bursary to participants and/or their schools).

The proposal above focusses on re-training established teachers up to GCSE, where the need is greatest. An extended programme would be required to re-train teachers up to A level. The IOP is developing a certification framework which could be used to help certify participants in appropriate retraining provision as 'specialist physics teachers (up to GCSE in this instance)'.

Workload

Policy recommendation: The Committee should call on the Welsh Government and education providers to ensure that physics-specialists teach within their specialism. This would be instead of teaching all three disciplines in the sciences, two of which they may have no specific expertise in. However, we know there are serious teacher shortages across subjects in many schools. Subject flexibility, where physics specialists can teach other subjects they may prefer, such as maths, in their second subject. Many physics specialists may have a stronger background in maths (due to the use of maths in physics) instead of biology and chemistry.

Efforts should be made to support schools and timetablers in deploying staff and especially NQTs to teach timetables that more closely match their expertise and preferences. In this context this would mean that, if their expertise is mainly within one of the sciences and that is the subject they are most confident teaching, effort should be made to match their timetable with that science as much as possible. In addition, if unmatched timetables are inevitable, many physics teachers may be more comfortable teaching physics and mathematics, rather than biology and chemistry. Many engineering graduates may also be more comfortable teaching physics and mathematics which could also widen the potential pool of physics teacher candidates.

High teacher workload has an impact on both teachers' teaching and learning in school and teachers' ability to take up continuous professional development opportunities. Evidence shows that physics teachers in the first five years of their teaching career (in England) note workload as a main barrier to staying in the job. For Wales this situation is likely worse as many new physics teachers starting their career are most likely the only physics specialist in their school. This places a significant workload and pressure on them in the first years of their career.

High workload is noted as a significant factor in attrition across subjects in secondary schools. It also creates a negative view of teaching amongst those who may otherwise have considered the career. Teaching out of specialism, particularly in the early stages of a teaching career, exacerbates this through increasing the amount of time teachers have to spend on preparing for lessons (including potentially making sure they feel sufficiently comfortable with the subject matter themselves).

This approach is not making the best use of physics-specialist teachers and fails to provide students with the best possible teaching in each of the sciences.

It contributes to factors that we know drive attrition:

- it adds to their workload: they have to prepare many more distinct lesson plans; and they may have to prepare for up to three subjects (biology, chemistry and physics), two of which they may not have studied since they were 16 and are likely to be outside their comfort zone.
- it reduces their job satisfaction because they are being taken away from the subject for which they originally had a passion.
- it slows the rate at which they become good: without enough repeat classes, they lose the opportunity to reflect and improve within a week of teaching a given lesson; and it will take them up to three years to have taught, for example, year 9 forces, 3 times.
- it reduces their sense of self-efficacy, adds to their stress, and contributes to the general sense that the profession might not be for them.

3. **School Leaders: specific factors affecting recruitment and retention of school leaders.**

4. **Diversity of the workforce: whether the current and future workforce reflects the diversity of the Welsh population including gender, race and ethnicity and disability.**

Gender gap

Around 75% of Wales' overall teaching workforce are female.[44] However, currently only about 41% of those delivering physics education in Wales are female. Negative stereotypes around the types of people who do physics must be broken to help ensure girls have the opportunity to continue studying physics at post-16. Increasing the number of people studying physics post-16 could widen the pool of people who may choose to become physics teachers.

The Wales wide data suggests women are more likely to become teachers than men, by 3:1. However, men are more likely than women to deliver physics education in schools. This is in part because the supply of physics graduates (who could then go on to do a PGCE and become teachers) is heavily skewed towards men. Women are underrepresented on physics undergraduate courses at university, thereby restricting the supply of potential teachers.

For Wales domiciled students studying physics at university in the UK for 2021/22, 75% were male and 24% were female. This aligns similarly with physics A level data where generally, around 20-24% of the cohort in Wales are girls. Most recent data for

[44] Education Workforce Council. 2024. Annual Education Workforce Statistics for Wales 2024. EWC: Online. p. 12.

2024 showed that 22.4% of those who took physics exams in Wales were girls.[45] Physics is the 2nd most popular A level subject for boys, but the 16th for girls. This is an issue for the future supply of the physics teacher workforce.

This gender gap limits girls' options through no fault of their own and their chances of pursuing physics at post-16. Girls at a young age face barriers to physics education that may be denying them opportunities. Known factors affecting girls' progression in physics may include access to a specialist physics teacher; quality of physics teaching; family support; socio-economic background of students in the cohort or negative stereotypes faced from an early age.[46]

These factors are likely restricting the number of girls pursuing physics education to a university level and therefore restricting the number of potential teachers (following the assumption that women are more likely to become teachers than men).

5. Impact on learners: of the current position on and the delivery of education and on wider support for learners.

GCSE reform and learner attainment in the sciences

Policy recommendation: The committee should call on Welsh Government and Qualifications Wales to ensure that most learners in school are offered a single pathway through the sciences at GCSE which will play a significant role in opening post-16 routes. We are currently at risk of seeing a system where schools decide which routes learners can progress on, limiting their options when they come to make their post-16 choices.

We are concerned that the current plan for GCSEs in the sciences and the learner entitlement risks seeing fewer learners take a GCSE in the sciences that leads to post-16 study. The Institute of Physics advocated for a single route for all learners through the sciences as Wales moved away from the old model of separate routes which has poor implications for equity for learners. We are now at risk of reverting to this inequitable path with the introduction of different tiers of science education (Foundation, Single GCSE and the Double Award GCSE), limiting students' options.

This risks placing a downwards pressure on A level physics uptake which then knocks on through to fewer students doing physics at university and reduces the available cohort who could go on to teaching – thus worsening the cycle.

As referenced earlier in this response, Wales achieved its lowest ever PISA results for science in 2022. [47] Wales performed below both UK and OECD average. Disadvantaged children in England scored about 30 points higher, on average, than

[45] Joint Council for Qualifications JCQ. 2024. AS and A Level results summer 2024. JCQ: Online. p. 42.
[46] Institute of Physics. 2017. Improving Gender Balance: Reflections on the impact of interventions in schools. IOP: Online.
[47] Senedd Research. 2023. How did Wales perform in PISA 2022? Cardiff. Senedd Research.

disadvantaged children in Wales. Most shockingly, the performance of disadvantaged children in England was either above or similar to the average for all children in Wales.[48] This points to an urgent need to get the delivery of science education in Wales right. Ensuring that learners have access to a specialist teacher in the three science disciplines will go a long way to delivering better outcome for learners.

Even small improvements in GCSE grades can have dramatic effects on an individual's lifetime earnings.[49] IOP calculations suggest that the existence of a specialist physics teacher, even under modest assumptions, has significant potential benefits for boosting a learners' attainment, potential to go on to A level and a significant boost in lifetime earnings with compounded benefits for the economy and physics' contribution to Wales' GVA, which stood at £7.3bn in 2019.[50] Even small changes in the contribution physics-powered industries make to the economy would be significant. If physics education in Wales is done right, the potential is huge.

6. **Impact on delivering educational reforms: including the Curriculum for Wales. Additional Learning Needs and Education Tribunal (Wales) Act 2018 and the Welsh Language and Education (Wales) Bill.**
7. **Impact on teachers and wider workforce: including impact on use of teaching assistants and support staff, effect on use of supply teachers.**
8. **Addressing recruitment and retention: What actions should be taken, and by whom, to ensure the sustainability of the education workforce and how such actions should be prioritised.**

[48] Institute for Fiscal Studies. 2024. Major challenges for education in Wales. Institute for Fiscal Studies: Education Policy Institute. p. 3
[49] Hodge, L et al. 2021. GCSE attainment and lifetime earnings research report. UK Government: Department for Education.
[50] Institute of Physics. 2022. The contribution of physics to the Welsh economy. IOP: Online.

Agenda Item 5.1

Email from individual regarding the Legislative Consent: Children's Wellbeing and Schools

I am writing about the provisions affecting home educators in the CWS Bill.

It is a central flaw in this bill that it pays no regard to the voice of the child.

It is also remarkable that the government has chosen a confrontation with home educators, instead of generative engagement.

Of course children must be kept safe. But the CWS Bill contravenes basic human rights, and it will likely not even be effective in protecting those children truly in need, while at the same time obstructing and even preventing a good education outside of school for so many.

Home educators are, in the main, diligent people who care very deeply and provide very effectively for their children - often in circumstances where the state has been unable to provide a suitable education for the child in question. Local authorities, by contrast, are inevitably administrators, short on time, expertise and insight. The focus should be on the child's voice, and this will be undermined where the focus is instead on satisfying a local authority employee who does not know the child and cannot (based on experience in various different LAs) be relied on to understand the breadth of approaches that constitute a good education.

In any event, the reporting requirements are likely to prove practically unworkable.

Further, the regrettably confrontational stance taken in the bill may deter those who need help (or indeed medical care) from asking for it, and the failure to engage openly with home educators is a missed opportunity to craft a framework that would truly protect and uplift children.

Existing systems - in particular, education and social services - are painfully underfunded and unable to deliver on their obligations; and this constitutes a substantial problem for safeguarding. It is also questionable how well the school system is protecting children's mental health and preparing them for life. The government should properly fund, and fix the holes in, existing systems, and think constructively (not oppositionally) about how best to identify those in need of further support or protection.

Moreover, with the growing sense of unease about the developing political landscape, legislation that has authoritarian leanings is concerning.

I would be happy to meet to discuss. I would in any event like to receive a substantive response that indicates the government is engaging with the concerns raised, rather than one of the dismissive responses that have been given to others.

Huw Irranca-Davies AS/MS
Y Dirprwy Brif Weinidog ac Ysgrifennydd y Cabinet dros Newid Hinsawdd a Materion Gwledig
Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs

Llywodraeth Cymru
Welsh Government

Mike Hedges MS
Chair
Legislation, Justice and Constitution Committee
Senedd Cymru

SeneddLJC@senedd.wales

5 June 2025

Dear Mike,

Inter-Institutional Relations Agreement: Intergovernmental Relations Annual Report

I am writing in accordance with the inter-institutional relations agreement to notify you that I today laid an Intergovernmental Relations Overview Report, which covers the period of April 2023 to July 2024. The published report can be accessed here. In addition, I have issued an accompanying written statement, which can be accessed here.

I have copied this letter to the chairs of the Committee for the Scrutiny of the First Minister; Children, Young People and Education Committee; Climate Change, Environment, and Infrastructure Committee; Culture, Communications, Welsh Language, Sport, and International Relations Committee; Economy, Trade, and Rural Affairs Committee; Equality and Social Justice Committee; Finance Committee; Health and Social Care Committee; and Local Government and Housing Committee.

Yours sincerely,

Huw Irranca-Davies AS/MS
Y Dirprwy Brif Weinidog ac Ysgrifennydd y Cabinet dros Newid Hinsawdd a Materion Gwledig
Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs

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Gohebiaeth.Huw.Irranca-Davies@llyw.cymru
Correspondence.Huw.Irranca-Davies@gov.wales

Bae Caerdydd • Cardiff Bay
Caerdydd • Cardiff
CF99 1SN

Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

Inquiry into teacher recruitment and retention

Following the meeting on 5 June 2025, NASUWT provide an analysis of the figures from the survey carried out with its Members.

Response from NASUWT:

The data I was using was from the NASUWT Big Question Survey 2024 and can be found using the exploration tool available using this link:

NASUWT | Big Question Survey - Explore the Data

Cyngor Cyllido Addysg Uwch Cymru
Higher Education Funding Council for Wales
hefcw

Swansea University
Prifysgol Abertawe

Sunproofed +

Dr Julie Peconi
Chief Investigator, Sunproofed Study
School of Medicine, Swansea University
Singleton Park, Swansea
SA3 5PR

11 June 2025

Lynne Neagle
Cabinet Secretary for Education
National Assembly for Wales
Cardiff Bay
Cardiff
CF99 1NA

Your ref LN/00447/25

Dear Ms Neagle,

Thank you for your letter of 06 May 2025 regarding my correspondence and research findings on sun safety in schools.

As requested I have now contacted education and health officials at healthandwell-beingcurriculum@gov.wales.

I have also been in correspondence with colleagues from Public Health Wales to discuss the possibility of sun safety being included in a potential Health Literacy curriculum toolkit.

I wanted to thank you again for your interest in sun safety and skin cancer prevention and my research in this area. I will keep you updated on these discussions.

Yours sincerely,

Dr Julie Peconi, Chief Investigator, Sunproofed Study, j.peconi@swansea.ac.uk
cc: Buffy Williams, MS, Chair of The Children, Young People and Education Committee
Sioned Williams, MS, Plaid Cymru

Inquiry into teacher recruitment and retention

Following the meeting on 5 June 2025, NASUWT provide an analysis of the figures from the survey carried out with its Members.

Response from NEU:

Please find attached a summary of our Mental Health and Wellbeing Survey results from 2021 and 2023.

The 2023 summary doesn't include the stats on those planning or thinking of leaving the profession. However, those stats are below:

Survey Respondents – 2169 (1734 teachers)

Planning on leaving the sector – 294 (248 teachers – 14.3%)

Thinking of leaving the sector – 912 (751 teachers – 43.3%)

So, total teachers planning or thinking about leaving the sector in 2023 – 999 (57.6%).

A breakdown of how long they had been working and their age ranges are in the table below. Some did not inform us of how long they had been working as a teacher (2023 survey).

Time as a teacher		Planning on leaving	Thinking of leaving
less than 1 year		0	7
1-5 years	81	10	
6-10 years	14	100	
over 10 years	224	562	

Age range		Planning on leaving	Thinking of leaving
18-24	1	11	

25-34	18	159
35-44	52	226
45-54	92	260
55-64	77	92
65+	8	1

We did not ask them for a reason why they were thinking of leaving but as it's a mental health and wellbeing survey, we can only assume that it's due to the stress of the job (workload, lack of work/life balance, etc.).

What was also very concerning was that in 2021, 10% of respondents had suicidal thoughts, in 2023 that rose to 18%. Both these figures are in the attached summaries.

NEU Cymru Mental Health & Wellbeing Survey 2021

Motions to Conference Cymru on the growing mental health crisis in Wales's education sector noted that funding issues, excessive workload, testing, scrutiny, and accountability were significant factors in the increasing number of members struggling to cope and developing mental health problems.

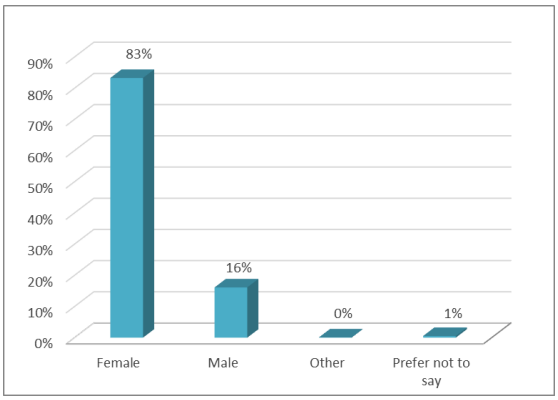
In July 2021, NEU Cymru, supported by Unite and GMB unions, conducted a mental health and wellbeing survey of education sector workers across Wales. The survey attracted over 1600 responses from workers across all job roles in schools, colleges, and universities and highlighted the strength of feeling amongst our education sector workforce.

Key Findings

The main findings from the survey indicate that:

- Excessive workload continues to be the leading cause of workplace stress and mental health issues
- There is a significant lack of support measures in place for workers experiencing poor mental health
- Negative workplace cultures surrounding mental health mean that only a small percentage of individuals access help or support for mental health problems

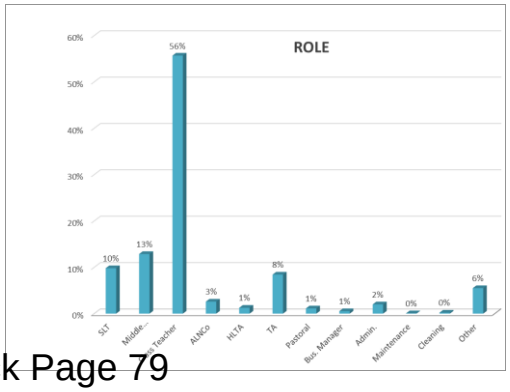
Survey Overview



With an average ratio of 75% female and 25% for the teaching profession in Wales, the overall survey responses are slightly more representative of women.

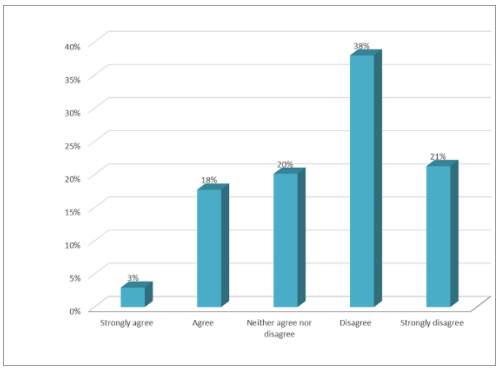
All Local Authorities in Wales took part in the survey and all four Consortia were represented in the responses. The vast majority of survey responses came from workers in the primary and secondary sectors, with a small number of responses received from Further Education (FE) and Higher Education (HE) workers. All age groups were represented with almost two thirds of responders aged between 25 and 54.

Given that most responses- to this survey came from classroom practitioners (88%), we feel it is prudent to focus on the responses received from those particular job roles and types in this report.



Factors Affecting Mental Health

Only 21% of people indicated that they felt they had a good work-life balance.

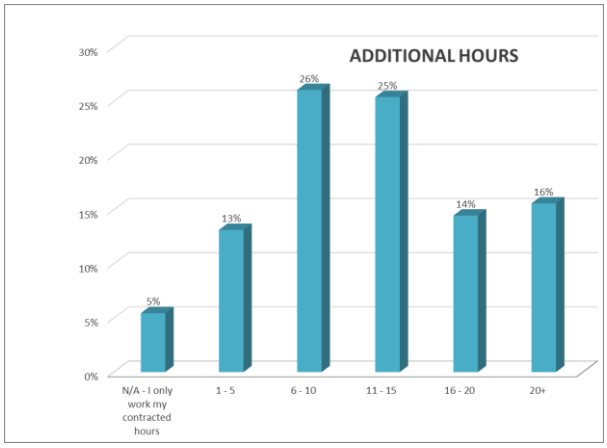


With 95% of survey respondents indicating that they work more than their contracted hours, workload continues to be a huge issue for the sector.

Almost half (47%) of respondents agreed/strongly agreed that their personal relationships had suffered due to problems at work.

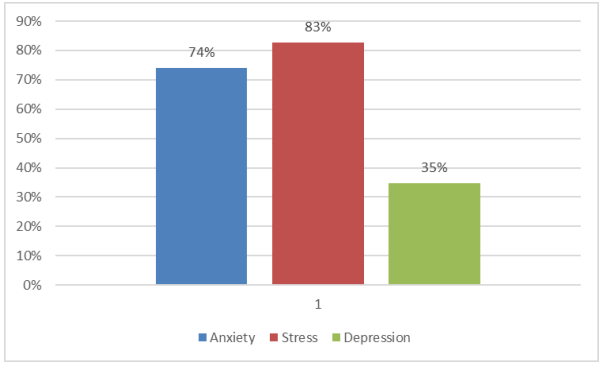
Prior to the Covid-19 pandemic around 73% of survey respondents admitted that they had been affected by poor mental health (35% of these had been affected significantly). This figure has risen over the course of the pandemic to 84%.

50% of respondents agreed/strongly agreed that pupil behaviour affected their mental health.



Just 5% of education workers work their contracted hours. This includes workers from all job roles and types apart from senior leadership.

80% of respondents agreed/strongly agreed that work has impacted on their mental health, and 64% of workers said that work pressures had made their mental health worse. Over the past 12 months, 84% of those surveyed had supported colleagues in the workplace in emotional distress at least once. Only 18% have a diagnosed mental health condition.

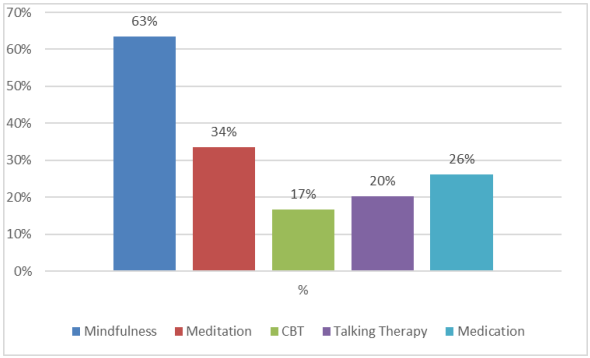


A staggering 58% of respondents had experienced a mental health issue in the 12 months leading up to the survey with 38% contacting their GP, yet only 22% of respondents taking time off work due to poor mental health, with stress and anxiety being the leading cause.

Even more worrying - 10% of respondents agreed/strongly agreed that they had had suicidal thoughts related to their work.

Mental Health Management

Of those who responded to the question on techniques or activities that they had tried to help to manage their mental health, 63% had tried mindfulness. Other responses included exercise, counselling, prayer and self-help books, and podcasts.



When asked what they believed could be done to help ease mental health issues in the workplace:

- 47% wanted increased parity between the way mental health and physical health are treated/perceived at work
- 39% wanted de-stigmatisation of mental health issues
- 41% wanted a designated quiet area at work
- 39% wanted a more open culture/environment and
- 36% wanted increased structure around the processes to deal with mental health issues

There were also calls for:

- A reduction in workload – working smarter and not harder with sensible hours
- Equal and fair treatment of staff – caring about employees and not just treating them like a number
- Bullying to be taken more seriously
- Addressing pupil behaviour.

38% of individuals would be most likely to 'say nothing and carry on as normal' if they were to suffer poor mental health symptoms. Another 12% of survey respondents said they had suffered from poor mental health yet had not taken any time off work.

Employer Support

Support from employers is intermittent. Only 28% of survey respondents agree that their employers are supportive of mental health and only 16% said that their employer carried out wellbeing surveys. Just 33% said that their employers are signposting to available supports.

Interestingly, over half the respondents did not know if their workplace had a mental health and wellbeing policy and a third are unaware of what workplace mental health support programmes, if any, exist.

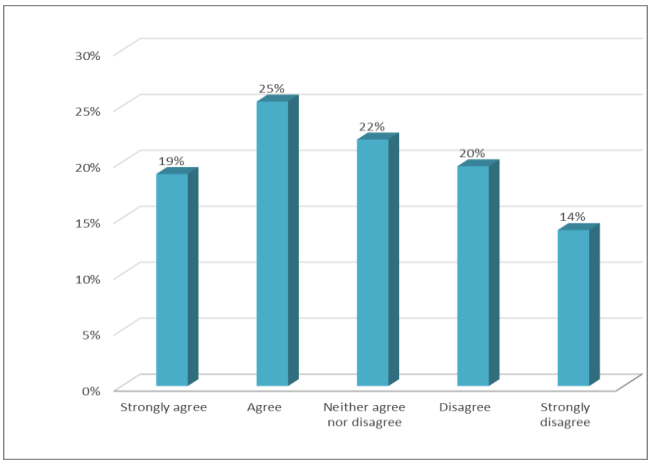
Mental health is, according to one third of respondents, regarded as a tick box exercise by colleagues and seen as a sign of weakness. Just under a third of survey respondents agreed/strongly agreed that poor mental health had prevented them from progressing at work and few workers (15%) would talk to a senior manager or HR for support regarding poor mental health.

For those returning to work following absence due to poor mental health, there is very little support with less than a quarter feeling their return to work had been well handled. Many were overwhelmed by the amount of work they had returned to and were made to feel as if they had let others down.

A small number of employers (according to 19% of survey responses) are working with staff to reduce workload and to develop staff health and wellbeing programmes (including flexible working).

Conclusion

Whilst it must be recognised that supporting mental health and wellbeing in the workplace is important in building resilience in our education workforce, we cannot assume that this alone will cure the mental health crisis in the sector.



44% of survey respondents (50% of classroom teachers) are seriously considering leaving the sector, with a further 22% thinking of doing so.

Tacking the core issues and causes of mental health problems is vital in battling the crisis. Excessive workload, workplace culture, stigma, and pupil behaviour are key areas which need to be addressed if we are to stem the flow of workers leaving the sector.

NEU Cymru's mental health and wellbeing campaign will aim to address the findings of this survey in its upcoming priority campaign to improve the wellbeing of our education workforce in Wales.

NEU Cymru Mental Health & Wellbeing Survey 2023

Following on from the survey we conducted in July 2021, NEU Cymru ran a follow-up survey two years on in July 2023.

The most recent survey, which attracted over 2,000 responses from workers across all job roles in schools, colleges and universities across Wales, continues to highlight the strength of feeling amongst our education sector workforce on the impact of work-related issues on mental health and wellbeing.

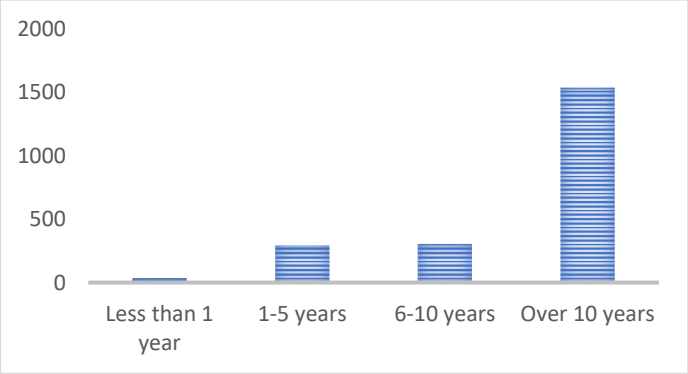
Key Findings

The main findings from the survey indicate that:

- Excessive workload continues to be the leading cause of workplace stress and mental health issues. *92% of respondents regularly work over their contracted hours – most feeling pressured to do so - with only 9% feeling that their workload is fully manageable. 73% of respondents said their workload had actually increased over the past 12 months.*
- Despite efforts to implement the Welsh Government framework on the Whole School Approach to Wellbeing, negative workplace cultures persist in over a third of all workplaces. *27% of survey respondents feel they never have a voice or feel heard or listened to and over a third have witnessed unacceptable behaviours including bullying and emotional and verbal abuse.*
- Support for workers experiencing poor mental health is sporadic at best. Only 28% of respondents said their workplace had a wellbeing policy and a*lmost a fifth of those surveyed had unsupportive line managers.*

Survey Overview

Individuals from across all local authorities in Wales took part in the survey, their education settings ranging from nurseries to universities. All age groups were represented with almost two thirds of responses from individuals aged between 35 and 54 and, of those, 82% of the responses were from women.

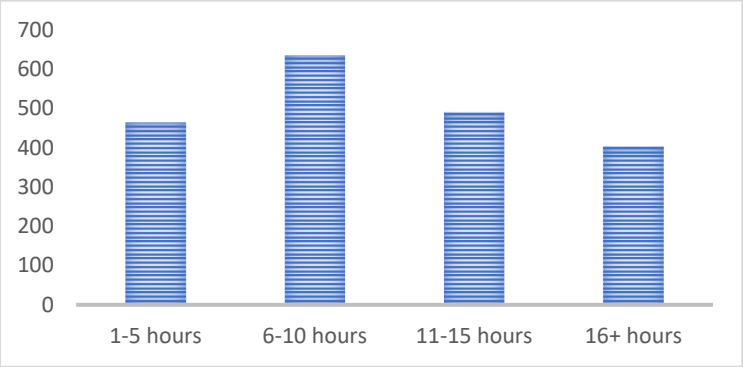


70% of respondents have been working in the education sector for over 10 years.

Factors Affecting Mental Health & Wellbeing

Demands

In an ideal world, all workers should feel capable of handling the demands of their role. They should have achievable tasks within their contracted hours, and they should feel comfortable voicing concerns about their role, work, and environment, with the assurance that their concerns will be heard and addressed.



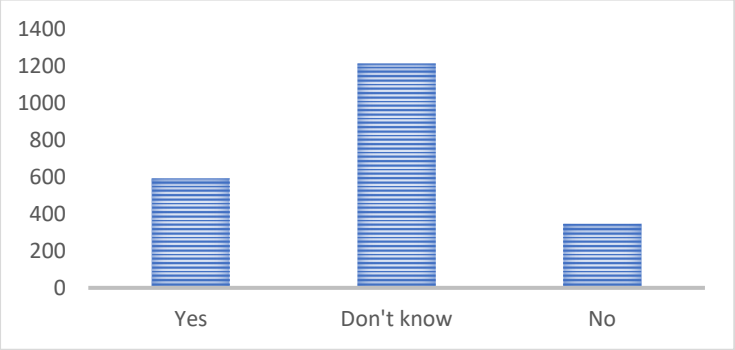
The majority of survey respondents work more than their contracted hours.

Almost all survey respondents feel that their workload is impacting negatively on their emotional health and wellbeing. 43% of feel pressured to work additional hours and that their workload is unmanageable with deadlines that are neither realistic nor achievable. 73% of people said that their workload has increased during the past 12 months.

"It is simply assumed you will get everything done because we all do. Sadly, we do it at night!"

Environmental Factors

Maintaining a healthy workplace improves productivity, employee retention, and overall mental wellbeing. It involves collaboration among workers, managers, and wellbeing teams to enhance the health, safety, and wellbeing of all employees.



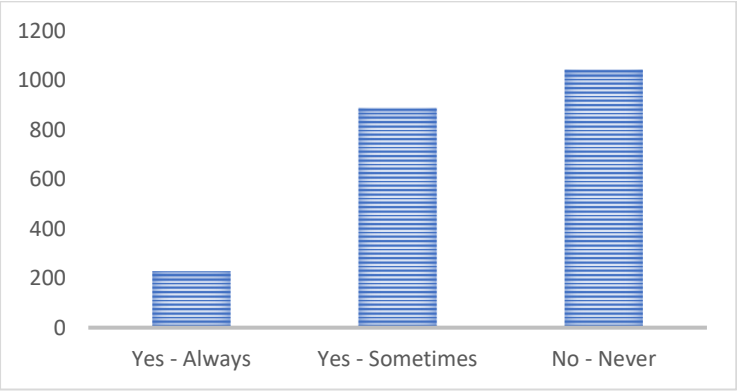
Over half of survey respondents don't know if there is a wellbeing policy in their workplace.

Only 14% of workers believe their workplace is committed to employee health and wellbeing. Almost two thirds of those surveyed state they are never included in discussions around physical and verbal abuse in the workplace and nearly half of all respondents were not given opportunities to attend training related to dealing with difficult or challenging behaviours. As a result, stress and anxiety levels are higher and many individuals feel threatened, powerless, and less able to self-regulate their emotions.

"Stress levels and wellbeing are occasionally acknowledged but no actual changes are ever implemented. The rigours of inspections always outweigh the need to make working conditions better for teachers."

Control

Ensuring a sense of control in our roles involves being consulted and involved in the organisation and execution of our work. This includes having the opportunity to be included in new projects or tasks, where we are empowered to utilise our skills, abilities, and experience.



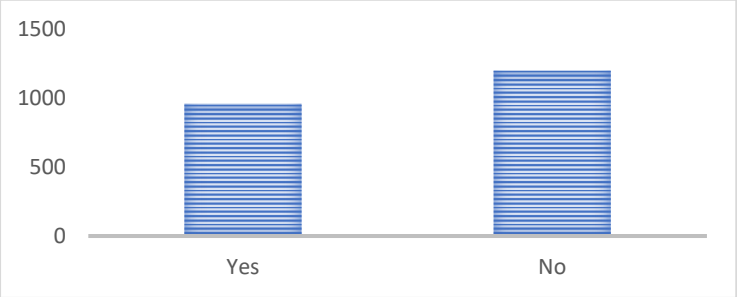
Almost half of survey respondents are never given opportunities to contribute to the reviewing of policies and procedures.

45% of workers are never involved in decisions about their work, a quarter of respondents are never given any say in how they undertake their work and fewer than 20% are encouraged to upskill or contribute to activities outside their role.

"We are often not included in the process and told what we need to do."

Skills & Abilities

Maintaining up-to-date skills is crucial for adapting to evolving workplace requirements. It also prepares individuals for potential new opportunities within the workplace.



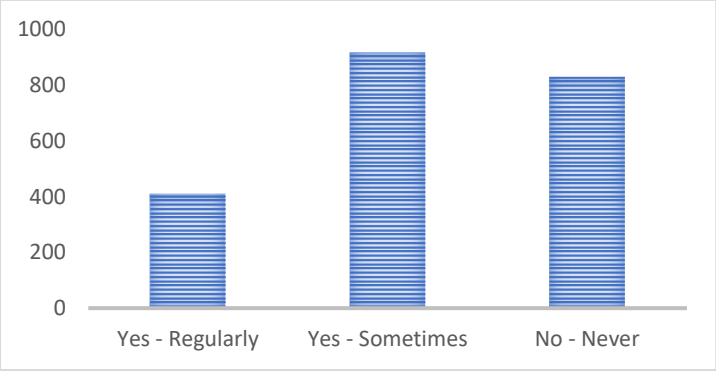
Training and developments are not considered or reviewed regularly for 56% of survey respondents.

Less than a quarter of those surveyed are given regular opportunities by their employer to attend training.

"Availability of courses has diminished due to a lack of funding and school budget restrictions. Money is not available to cover supply costs. We have to demonstrate professional development, but this has to be done in our own time and/or at our own expense."

Support

Feeling supported at work entails having access to timely information and assistance from colleagues and managers. Understanding the available internal and external support, and knowing how to access it, is beneficial for everyone.



Less than one fifth of workers have regular 1-2-1 meetings with their line managers to talk about emerging issues or pressures.

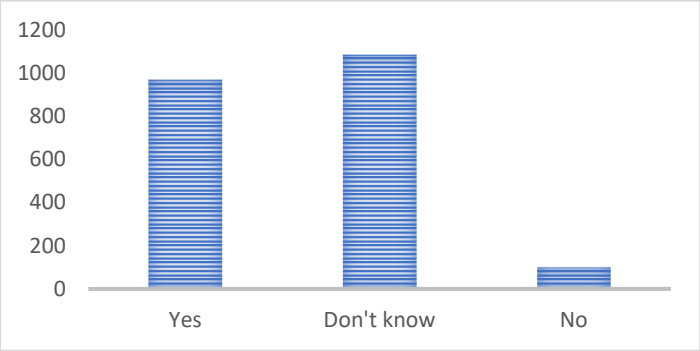
Generally, most respondents feel that they are respected by their colleagues and that their colleagues are supportive. Line managers are also generally supportive, and feedback is provided in a supportive manner.

Only 9% of employers regularly encourage and provide opportunities for workers to engage in healthy behaviours such as being physically active, eating healthy and wellbeing activities. Over half of employers offer no opportunities whatsoever.

"I'd rather a certain situation get sorted out properly than being offered 'support' from a call centre when things reach crisis point."

RELATIONSHIPS

Positive work relationships are crucial to avoid experiences of bullying or harassment. It is important to recognise how our organisation promotes positive behaviours and familiarise ourselves with the policies in place to prevent or address such issues.



Only 45% of workplaces have written policies for dealing with unacceptable behaviour, including procedures for reporting such issues.

The main behaviours witnessed in the workplace include…

- Bullying and harassment
- Emotional abuse
- Verbal abuse
- Victimisation

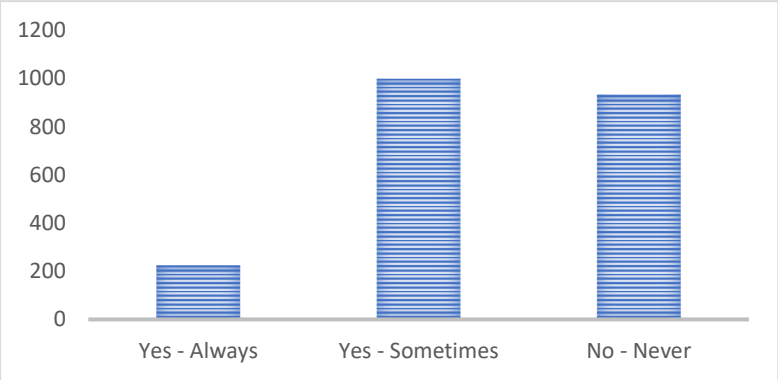
Other behaviours include physical abuse, sexual abuse, and malicious gossip.

A third of respondents do not feel that honest, open communication is encouraged in their workplaces and many incidents of unacceptable behaviours go unreported.

"Senior management are reluctant to tackle issues of bullying and inappropriate behaviour."

Change

Organisational changes should be managed and communicated effectively, ensuring staff feel involved and engaged. They should be consulted, given opportunities to influence plans, and informed about potential job and work-related implications.



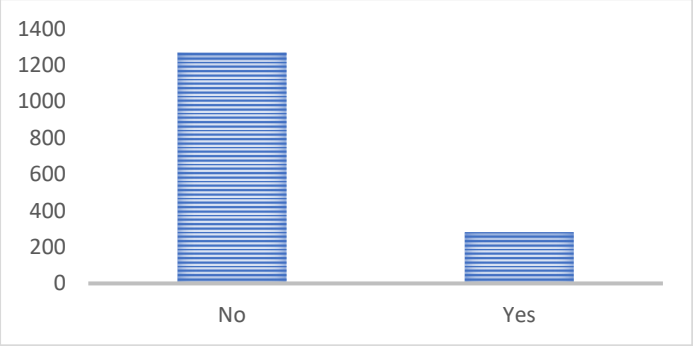
Only 10% of workers feel they are fully consulted with appropriately when changes are made which affect their work.

A third of survey respondents are unclear on how changes made will work in practice and how those changes will affect them.

"In terms of organisational change, I don't have a say in this and am always told at the last minute."

Mental Health and Wellbeing

Over the 12 months leading up to the survey, 25% of survey respondents had taken time off work due to poor mental health. The main reasons given for their absences were due to stress, anxiety and/or depression, with a third citing work related issues and another third citing personal and work-related issues as the reason.



A staggering 18% (282 individuals) admitted to having had suicidal thoughts in relation to their poor mental health.

27% of those who had taken time off had visited their GPs. Approximately 12% of those had been referred to Occupational Health and/or had been referred for counselling or other services. 42 individuals accessed the Employee Assistance Programme.

Just One Story

Hearing first-hand from the survey respondents about their experiences is a key motivator to push for change. This is just one of 294 experiences that have been shared with us…

"I have experienced bullying by my Head teacher over many years until I had the courage to report what was happening, by which time my mental and physical heath were impacted. I was ostracised by some staff members but supported by others. It led to me being overlooked for promotions in school and be constantly observed which eventually led to me being off work with stress and anxiety. I had counselling arranged by Occupational Health at my request. If it wasn't for the support of my Union I would never have gone back into teaching as I felt so worthless and questioned my ability as a teacher. It has had a lasting impact on my wellbeing. I am now actively involved in staff wellbeing and feel issues such as this should be handled by professionals and not employees of the local authority."

Conclusion

The NEU Cymru Mental Health & Wellbeing Survey 2023, based on responses from over 2,000 education sector workers in Wales, reveals persistent challenges.

Excessive workload remains a primary source of stress, with 92% working beyond contracted hours. Negative workplace cultures endure, impacting voices and leading to unacceptable behaviours like bullying. And lack of control in key decisions that impact on working practices and workload underscores the need for organisational changes, effective communication, and comprehensive support to address these issues and promote mental wellbeing in our education settings.