

14 to 16 learning under the Curriculum for Wales: consultation on statutory learning guidance
May 2024

<https://www.gov.wales/14-16-learning-under-curriculum-wales-html>

The Royal Society of Biology responded to the Welsh Government's [consultation on draft 14 to 16 statutory learning guidance](#) under the Curriculum for Wales. The Royal Society of Biology has engaged with Welsh Government and Qualification Wales during development of the new [Curriculum for Wales](#), proposals for new Qualifications as part of the new curriculum, and in advance of this draft guidance for learners at GCSE taking the new qualifications. The Royal Society of Biology is invested in ensuring pathways through GCSE support all learners to progress and ensure equitable access to the sciences. RSB has previously advocated for a single route through the sciences at GCSE in Wales and seeks to ensure the statutory guidance for 14 to 16 learners does not replicate issues within the current qualification landscape.

To inform this submission, RSB has drawn on its 2021 publication [Evolving 5-19 Biology: recommendations and framework for 5-19 biology curricula](#), previous responses to consultations and policy announcements by Qualifications Wales and Welsh Government, and informal discussions with Qualifications Wales and Welsh Government and our partner organisations across the sciences. RSB's education-focused groups and committees have fed into established and published policy positions that have informed this response, including Education and Science Policy Committee, Curriculum Committee, Biology Curriculum Committee and Education Policy Advisory Group.

RSB's published responses and letters, and associated responses:

RSB's open letter to Qualification Wales Board and Jeremy Miles Minister for Education and Welsh Language (June 2023)

<https://www.rsb.org.uk/news/rsb-sends-letter-to-qualifications-wales-in-response-to-decision-report-on-new-gcses-in-wales>

Qualification Wales response to RSB's letter (July 2023) <https://qualifications.wales/news-views/open-letter-to-royal-society-of-biology-in-relation-to-new-made-for-wales-gcses-in-the-sciences/>

RSB response to Qualification Wales' consultation on the proposed GCSE The Sciences (double award), alongside mapping of the proposed content to RSB's [Evolving 5-19 Biology](#) exemplification (December 2022)

https://www.rsb.org.uk/images/RSBs_Response_to_Qualification_Wales_GCSE_The_Sciences_double_award_December_2022.pdf

https://www.rsb.org.uk/images/Mapping_proposed_GCSE_The_Sciences_against_RSBs_Evolving_5-19_Biology_-_December_2022.pdf

RSB response to Qualification Wales' consultation on the future range of subjects that should be available as GCSEs and which other made-for-Wales qualifications should be available alongside them (April 2021)

https://www.rsb.org.uk/images/Qualification_Wales_consultation_response.pdf

We would like to acknowledge the support of our Full and Supporting Member Organisations, a group of approximately 80 organisations, working in diverse disciplines across the biosciences. RSB facilitates a number of policy groups, which meet to discuss and formulate responses to Government and other consultations. Member Organisations contribute their expertise to these groups and the responses, which are submitted on behalf of all RSB members. To find out more about organisational membership, and our current members, visit the [RSB website](#).

Background

The draft guidance published by Welsh Government explains the legal requirements for a school's curriculum for 14 to 16-year-old learners under the Curriculum for Wales. It looks to support schools in designing a curriculum offer which meets those requirements, as well as Welsh Government's priorities for learning and teaching in year 10 and year 11. Following consultation, statutory guidance will be published in relation to 14 to 16 learning under section 71 of the Curriculum and Assessment (Wales) Act 2021 (the 'Act').

Welsh government further notes:

"Throughout the draft Curriculum for Wales framework guidance we frequently use the word 'should' when we refer to the advice set out in statutory guidance. The use of that word refers to steps we strongly recommend schools and settings take. It does not purport to set out mandatory requirements. As these recommendations form part of statutory guidance, schools and settings must consider them, but may, with good reason, decide to do something different."

Consultation document extract - the sciences

<https://www.gov.wales/sites/default/files/pdf-versions/2024/2/3/1709117056/14-16-learning-under-curriculum-wales.pdf>

Key features of the 14 to 16 Learning Guidance

Qualifications to encourage breadth: the continued importance of science (page 10)

The Learner Entitlement also includes reference to qualifications that encourage breadth of learning. Schools should offer a broad set of qualifications that support a variety of future education and employment pathways, and that allow learners to begin to specialise while also helping them to maintain a breadth of learning across the Areas in line with the legal requirements.

The guidance sets out our policy in respect of science, within the guidance we acknowledge the importance of all learners following a challenging and ambitious qualification in science within years 10 and 11. This recognises the importance of science to an individual's understanding of the world that we live in and acknowledges the importance of science as an important qualification for many Science Technology Engineering and Maths (STEM) subjects and careers.

It is important that learners do not close down future pathways prematurely as a consequence of decisions made for year 10. Expecting all learners to take a challenging and ambitious qualification in science at 14 to 16 will help ensure their future options and pathways remain open.

14 to 16 statutory learner guidance extract - the sciences

<https://www.gov.wales/sites/default/files/consultations/2024-02/14-to-16-statutory-learner-guidance.pdf>

5.9 Science and Technology (page 14)

5.9.1 As described in the introduction to the Area within the Curriculum for Wales framework, the importance of science and technology in our modern world cannot be overstated.

5.9.2 Within the 'Qualifications to encourage breadth' component of the Learner Entitlement, schools are advised to offer a range of ambitious and sufficiently challenging courses that lead to qualifications within this Area, which will ensure a breadth of options for learners. This would extend to courses in computation and digital technology.

5.9.3 Specifically, in years 10 and 11, we would strongly advise schools to ensure that all learners follow an appropriate, challenging and ambitious course that leads to a qualification in science.

5.9.4 The new made-for-Wales GCSE suite of qualifications offers The Sciences – double award GCSE. This double award has been introduced to provide the most appropriate qualification for the majority of learners. This will also be a tiered qualification – with foundation and higher tiers – so that schools can enter learners at the most suitable level.

5.9.5 There will be an alternative, single award, integrated science GCSE, which provides an alternative route for the small proportion of learners who would benefit from undertaking a science qualification with less content than the double award, given their particular circumstances. This single award qualification is not designed to support progression to GCE science (AS and A-Levels).

5.9.6 This single award will not be available for first teaching until September 2026. Until then, the GCSE Applied Science (Single Award) will operate in a similar way for year 10 learners in 2025.

5.9.7 In respect of each individual learner, schools will be best placed to decide on the most appropriate science qualification, and will ultimately be responsible for that decision, taking into account learners' preferences, aspirations and pathways.

5.9.8 Whether or not a learner follows a course that leads to a qualification in technology, computer science or digital technology, it is vital that all learners are given the opportunities to make progress towards the four purposes through learning and experiences in this Area; such opportunities can be offered within the 'Wider learning and experiences across the curriculum' component of the Learner Entitlement.

5.9.9 As a cross-curricular skill, digital competence should feature across a learner's curriculum and all practitioners should be supporting their progress in that regard. It is advised that this should also provide opportunities for learners to develop their digital skills with growing independence in various contexts, and they should be supported to reflect on their progress in accordance with the principles of progression.

Royal Society of Biology response to Welsh Government's consultation on statutory learning guidance

Survey link: <https://www.gov.wales/node/60226/respond-online>

Deadline: 8 May 2024

Question 1 – To what extent do you agree that the 14 to 16 Learning Guidance helps you to understand your statutory obligations for 14 to 16 learners under Curriculum for Wales?

Strongly agree	Agree	Neither agree not disagree	Disagree	Strongly disagree
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Question 2 – To what extent do you agree that the 14 to 16 Learning Guidance helps you to understand how the qualifications offer should be used to support a 14 to 16 curriculum offer for learners under Curriculum for Wales?

Strongly agree	Agree	Neither agree not disagree	Disagree	Strongly disagree
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Question 3 – To what extent do you agree that the 14 to 16 Learner Guidance helps you to understand how a 14 to 16 curriculum offer should be designed?

Strongly agree	Agree	Neither agree not disagree	Disagree	Strongly disagree
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Question 4 – To what extent do you agree that the 14 to 16 Learning Guidance contains a sufficient level of detail?

Strongly agree	Agree	Neither agree not disagree	Disagree	Strongly disagree
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Question 5 – We would like to know your views on the effects that the policy outlined in the 14 to 16 Learning Guidance will have on the school workforce, including any impact it might have on workloads.

The Royal Society of Biology, along with other science organisations, advocated for a single route through the sciences at GCSE in Wales. With the introduction of a single award integrated science GCSE, there is a risk of exacerbating the inequity for students and issues with timetabling that currently exists in a dual route through the sciences and due to a shortage of specialist teachers in the sciences.

RSB continues to support and call for the double award GCSE The Sciences to be the expected route for close to 100% of students, with the three sciences within that timetabled separately, two GCSEs worth of time dedicated in the timetable, and a specialist teacher for each of biology, chemistry and physics deployed to teach within their subject area. The Society therefore has concerns about the existence of a single award GCSE in the sciences and the impact that will have on being able to deploy specialist teachers appropriately, and the burden a second route through the sciences at GCSE will have on the school timetable.

With schools facing budget cuts and a crisis in recruitment and retention across the UK, there is a significant risk that the proposed draft guidance allows enough scope for schools to enter more students, or even all students, on the single award integrated science GCSE, on the basis that the statutory learner guidance is stated as recommendations for consideration, but with good reason schools can decide to do something different.

Question 6 – We would like to know your views on the effects that the policy outlined in the 14 to 16 Learning Guidance will have on the diverse needs of individual learners, including those from disadvantaged backgrounds and those who share protected characteristics (as set out under the Equality Act 2010).

Background:

RSB advocated for a single route through the sciences at GCSE in Wales and remains confident that with foundation and higher tiering of qualifications that the most appropriate route for all learners in Wales will be the new double award GCSE The Sciences.

In the current qualification landscape, there is a tendency for schools to enter only the top one or two sets into the three individual science GCSEs (also known as “triple science”), with all other classes being entered into double award science GCSE. Initial conversations with Qualifications Wales suggested strong support for the single route through the sciences, but this has been undermined by the introduction of a single award integrated science GCSE as an additional route.

Since Qualifications Wales’ announcement that a single award integrated science GCSE in the sciences would also be introduced, RSB has voiced significant concerns publicly and privately with Qualifications Wales and Welsh Government about how many students may be entered into this single award, which is not designed to progress to A level and recreates the existing elitist system of a dual route through the sciences that is present in the current qualification system.

RSB is aware that a combined science foundation pathway at 14 to 16 is also part of the offer for students and notes there is no reference to this in section 5.9 of the draft statutory learner guidance. This creates a third route through the sciences at 14 to 16, and raises a question on whether the Integrated Science GCSE and combined science foundation pathway are targeting the same 6% of the student cohort, however this consultation response focuses on the two GCSE routes that are referred to in section 5.9 of the draft statutory learner guidance (Integrated Science single award GCSE and The Sciences double award GCSE)

Qualifications Wales have suggested that “a significant majority of learners in Wales” would be expected to take the double award GCSE and that any statutory learner guidance would ensure an entitlement for learners to study the double award GCSE. Previous Minister for Education and Welsh language Jeremy Miles made a statement in the Senedd stating that the expectation would be that only 6% of learners should be entered for the single award integrated science GCSE.

Following RSB’s open letter to Qualification Wales board highlighting concerns about the single award integrated Science GCSE, Welsh Government’s Education, Social Justice and Welsh Language Group arranged meetings with RSB and other learned societies with a view to ensuring that the expectations were delivered on by schools and to seek input from subject organisations as guidance was developed.

Draft 14 to 16 statutory learner guidance:

The Royal Society of Biology welcomes the paragraphs on page 10 restating “the continued importance of science” however, the Society remains concerned that the language in section 5.9 Science and Technology does not go far enough to ensure an entitlement to the double award GCSE for all learners.

Statutory guidance 5.9.3 strongly advises schools ensure “all learners follow an appropriate, challenging and ambitious course that leads to a qualification in science” - this language combined with the overarching advice that “recommendations form part of statutory guidance, schools and settings must consider them, but may, with good reason, decide to do something different.” gives significant leeway for schools to justify entering far more than the expected 6% of learners to be entered for the single award integrated science GCSE.

Statutory guidance 5.9.4 states that the double award GCSE The Sciences is the “most appropriate qualification for the majority of learners” with tiering - this statement does not go far enough to ensure there is an entitlement for all learners to be study the double award, and that it is a requirement for all schools to offer the double award GCSE The Sciences.

Statutory guidance 5.9.5 states that the single award integrated science GCSE is an alternative route for a “small proportion of learners” - this statement provides an avenue for schools to automatically enter lower attaining students into the single award, recreating the existing unintended consequence of selecting students out of progression to A levels based on their prior attainment in Years 7 or 8 that informs streaming and setting of classes. There is also the potential risk for schools to be able to use the wording of the guidance to justify assigning students onto the single GCSE pathway due to lack of qualified staff to teach the sciences.

While statutory guidance 5.9.4 refers to foundation and higher tiers as part of The Sciences GCSE double award, there is no reference to tiering of the single award Integrated Science GCSE. Qualification Wales as previously confirmed that tiering will be part of the assessment

structure for single award GCSE. RSB seeks clarification on this.

RSB strongly recommends that the guidance for the sciences (5.9.3 and 5.9.4) be revised to remove loopholes that may encourage schools to enter more students into the single award Integrated Science GCSE, or indeed not offer the double award The Sciences GCSE. Guidance 5.9.5 should be updated to include reference to tiering, as it appears in 5.9.4

RSB would support much stronger language in 5.9.7 to indicate that only in very exceptional individual circumstances would students be directed to the single award integrated science GCSE offer. 5.9.7 should be amended to ensure that every student has an entitlement to the double award GCSE The Sciences, regardless of their prior attainment, and that all schools must offer the double award GCSE The Sciences.

RSB also understands that the single award GCSE in the sciences was mooted on the basis that not all students could access and successfully complete two GCSEs, and that the single award GCSE would be allocated the time in a school timetable of two GCSEs to better support students. However, recent guidance from Qualifications Wales does not specify this, and the statutory learner guidance 5.9.5 does not refer to this expectation at all. While expectations of time allocation in the school timetable and Guided Learning Hours may not normally form part of statutory learner guidance, this style of one GCSE over two GCSEs worth of time is a significant departure from the current approach to GCSEs, and we would recommend this is clarified at statutory level if a school offers the single award Integrated Science GCSE to ensure that GCSE achieves its stated purpose.

RSB strongly recommends the guidance for single award integrated GCSE (5.9.5) in the sciences is updated to clarify this intention.

As in the response to Q5, RSB has concerns that some schools may choose to only offer the single award GCSE to most or all students on the basis of timetabling and workforce concerns, which would lead to significant inequity of access to the sciences across schools in Wales. This will be far more likely in schools in rural or disadvantaged areas, or schools that may be unable to recruit specialist teachers in the sciences.

Question 7 – What, in your opinion, would be the likely effects of the 14 to 16 Learning Guidance on the Welsh language in Years 10 and 11? We are particularly interested in any likely effects on opportunities to use the Welsh language and on not treating the Welsh language less favourably than English.

Do you think that there are opportunities to promote any positive effects?

Do you think that there are opportunities to mitigate any adverse effects?

No RSB response to this question

Question 8 – In your opinion, could the 14 to 16 Learning Guidance be formulated or changed so as to:

- have positive effects or more positive effects on using the Welsh language and on not treating the Welsh language less favourably than English; or
- mitigate any negative effects on using the Welsh language and on not treating the Welsh language less favourably than English?

No RSB response to this question

Question 9 – We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:

As stated in the Royal Society of Biology’s response to Q7, RSB strongly recommends a statement is introduced to the guidance to ensure that every student has an entitlement to the double award GCSE The Sciences, regardless of their prior attainment, and that all schools must offer the double award GCSE The Sciences.

Welsh Government point to the statement on page 10 that all Year 10 and 11 learners will be expected to follow “challenging and ambitious qualification in science” - it must be made clear that the expected route for not just the majority, but the expected route for all students, will be The Sciences double award GCSE and that a situation in which only students that are going to progress to A levels in the Sciences are entered into the double award must be avoided at all costs.

RSB understands that Estyn will be expected to monitor entries and provision of The Sciences GCSE and Integrated Science GCSE, and that information is yet to be published on the replacement for Capped 9 Points Score, and through those mechanisms red flags would be raised at any school not offering the double award to “the majority of students”. RSB would urge this to be taken further in expecting all schools to offer The Sciences GCSE, and for red flags to be raised if entries to Integrated Science GCSE are anything more than exceptional.

With multiple routes available through the sciences at GCSE, it appears that all students will be expected to study some form of science, and indeed this is stated on page 10. However, this is not set out in the statutory guidance itself. From discussions with Welsh Government and Qualifications Wales, RSB has been assured that all students would be expected to study a qualification or pathway in the sciences up to 16 and has not been informed otherwise. However, it is noted that at a teacher engagement event held in March 2023, three examples of pathways for students were given, only one of which includes a student studying the sciences as part of their 14-16 qualifications. The Royal Society of Biology is keen to seek clarity on this from Welsh Government and Qualification Wales.

RSB continues to flag continued use of mixed terminology in Wales, and the misinterpretation that a triple science route is being “lost” in favour of a double award. The Society urges Welsh Government and Qualifications Wales to make it clear that The Sciences GCSE is a new GCSE, taking the best features of triple science while reducing inequity of access to the sciences and

ensuring that students are well prepared for A levels in the sciences or science-related subjects, as well as any other route post-16 and is not a route only for top sets, or those planning to continue studying the Sciences. An opportunity has been missed to champion the positive aspects of a new GCSE in the sciences with the best features of both the previous triple and double award routes.