

# The Royal Society of Chemistry's Response to The Full 14-16 Qualifications Offer Consultation

June 2023

## Introduction

As part of the Qualified for the Future reform work, we responded to a consultation on reshaping the full qualifications offer in Wales which will be available to all learners aged 14 to 16 alongside the new GCSEs. These proposals range from entry level to Level 2 qualifications and include:

- a Skills Suite with an Integral Skills Project qualification and units/qualifications in Skills for Life and Skills for Work
- pre-vocational qualifications in broad occupational areas
- foundation qualifications to supplement the new GCSEs

1. *Overall, to what extent do you agree or disagree that the proposed qualifications will support schools to deliver the Curriculum for Wales?*

- Neither agree nor disagree

Overall, we feel that the proposed full offer at 14-16 should enable schools to deliver the Curriculum for Wales. We feel that the four purposes (ambitious, enterprising, ethical, healthy) will be met through the combination of GCSE qualifications on offer, alongside appropriate foundation qualifications for learners who struggle with level 2 content. For consistency and equity of opportunity for all learners, appropriate funding for schools would need to be provided so that all schools can offer all qualifications.

Having said this, we do have concerns over the number of new qualifications on offer. With GCSEs, foundation qualifications, skills suite (at three different levels), and pre-vocational qualifications, this is a huge number of diverse qualifications that schools have to choose from. It is likely to be the case that not all schools can offer all qualifications, which will lead to inequity and some learners missing out on opportunities afforded to others. This is likely to be particularly acute in areas of high socioeconomic deprivation, where schools likely have tighter budgets, fewer specialist teachers<sup>1</sup> and may therefore struggle to offer the full range of proposed qualifications.

2. *Overall, to what extent do you agree or disagree that the proposed qualifications will help learners to progress in life, learning and work?*

- Neither agree nor disagree

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<sup>1</sup> <https://www.rsc.org/policy-evidence-campaigns/chemistry-education/education-reports-surveys-campaigns/the-science-teaching-survey/2022/impact-of-understaffing/>

There is a current lack of progression routes at post-16 into the sciences at level 2 and above, for those learners who are not intending to take A levels. Therefore, Qualifications Wales should review the current offer at post-16, and work with post-16 providers to ensure that there are a variety of progression routes for learners undertaking the foundation qualifications, including opportunities in the sciences at level 2 and above. This may include clear messaging around the level and grading of the qualifications, so that they can be included in any entry requirements for appropriate post-16 courses. Qualifications Wales should also ensure that apprenticeship routes are available for these learners. It will need to be made clear what these foundation qualifications and associated grades mean to all relevant stakeholders, so that these learners are not disadvantaged by not having a more well-recognised GCSE-style grade.

*3. What (if anything) do you like about these proposals?*

We agree with there being a sciences-based qualification only in the foundation qualification group. As we are in favour of a single route through the sciences for most learners, this foundation qualification caters for those whom a GCSE qualification is not suitable. Multiple qualifications at the same level would not align with our position for a single route, so we are happy to see no pre-vocational science qualification.

*4. What (if anything) don't you like about these proposals?*

As mentioned previously, we do have concerns over the number of new qualifications on offer. These proposals will result in a huge number of diverse qualifications that schools must choose from. It is likely to be the case that not all schools can offer all qualifications, which will lead to inequity and some learners missing out on opportunities afforded to others. Qualifications Wales should consider the balance of choice and opportunity for learners, versus what is realistic for schools to take on as part of this development process.

We also feel this quantity of qualifications on offer may confuse the landscape and make it difficult for learners to understand or decide their route through it. The number of qualifications, and their relative equivalence may be confusing for post-16 providers, and as mentioned we recommend that Qualifications Wales works closely with them to ensure all routes are understood, and no learners are disadvantaged for taking certain qualifications. Future opportunity and progression for learners must not be limited by the large choice of qualifications on offer.

*5. Is there anything else we need to think about regarding our overall proposals?*

We believe that clear communication around these new qualifications is vital for their success, and for ensuring learners are undertaking the qualifications most appropriate for them. Learners (and parents) need to be very clear on what level their qualification is, what they are equivalent to, and what progression will be available to them if they take this route. This information must be in a format which is easy to digest and available before learners make decisions on what qualification is best for them. Teachers and school leaders also need to be very clear in who these qualifications are aimed at and what progression opportunities they offer (or close off), to advise and help learners make the best decision for them.

## Foundation Qualifications

*40. Overall, to what extent do you agree or disagree with our proposal for Foundation qualifications?*

- *Agree*

We are particularly in favour of a single route through the sciences for most learners but acknowledge that a full GCSE course is not appropriate for a small number of learners who find level 2 content particularly challenging. We agree with the proposal's assertion that these learners would be better served by taking an alternative qualification which builds (in particular) skills and confidence. We believe that all learners will be catered for with the two proposed qualifications; GCSE The Sciences, and this foundation qualification in combined science. All levels of attainment would be covered (entry, level 1, level 2) and there would be clarity in who each qualification is intended for. Any other qualifications in science at 14-16 would confuse the landscape and nullify many of the benefits of a single route through the sciences which we strongly advocate for.

We agree with the content spanning both entry level and level 1, providing a more aspirational experience and element of challenge for those learners who make good progress. We agree with the qualifications having a simplified, different grading structure to the GCSEs, as this will avoid potential confusion on equivalence amongst stakeholders. We also welcome a combination of a broad range of types of assessment, as this covers a variety of competences, caters for a wide diversity of learners, and should minimise the effect of any negative impacts associated with particular tasks.

Given the reasons behind this foundation qualification, we would want to see all schools being required to offer the foundation course in science alongside the GCSE 'The Sciences'. If this is not the case, some learners will either be forced to undertake an unsuitable GCSE, or not do science at age 14-16 at all.

*41. To what extent do you agree or disagree with the list of subject areas for Foundation qualifications?*

- *Agree*

As all of the areas of learning and experience (Areas) are covered by the proposed foundation qualifications, we are satisfied with the list of subject areas. By covering all the Areas, learners not able to access GCSE level content still have a choice of subjects from a broad and balanced curriculum.

We very much agree with separating the sciences from technology, as it maintains the disciplinary identity of these different subjects.

*42. Is there anything else we need to think about regarding Foundation qualifications?*

We strongly recommend that this new science foundation qualification is not referred to as 'combined science'. Currently in England, a large proportion of GCSE students follow a 'combined science' course, so using the same name would create confusion and possibly a misconception of equivalence.

Although there is currently no outline of potential content in the science foundation qualification, we would want to stress that as a general principle, any programme of assessment should include assessment of understanding of and ability in practical work. It is vitally important that practical work is embedded in this new qualification, so learners can explore scientific concepts in a hands-on way, encourage their curiosity and develop basic skills.

We would like to see the content for this proposed science foundation qualification be framed in a 'real-world' context. There is an opportunity to present science topics in a way which is relevant to these learners' lives (e.g. acids and bases framed in a kitchen chemistry context), which will be more engaging and useful to them. By designing the qualification in this way, it should allow learners to see how science is relevant to them by connecting it to experiences they may have had in their everyday lives. It should also show learners how the sciences could be used in future jobs, potentially encouraging further study of the sciences post-16.

Our [Green Shoots report](#) (a survey of 11 to 18 year olds and their teachers from across the UK and Ireland) found that 79% of young people see sustainability and climate change as a priority for the chemistry curriculum. 65% of 14 to 16 year olds feel there is too little content in the chemistry curriculum that directly refers to these topics. Therefore, we would also want to see sustainability and climate change content in this new qualification.

We are concerned that the potential first teaching date for these foundation qualifications will not align with the introduction of the new GCSE 'The Sciences' qualification. This would mean the majority of learners would be following the new (GCSE) curriculum, with these learners wishing to follow the foundation route having to either take this new GCSE or follow one of the outgoing entry level/level 1 qualifications. This presents a potential inequitable experience for this group, and Qualifications Wales should ensure that progression opportunities for these learners are not affected.