

Response from the Royal Society of Biology to Ofsted's consultation on proposals for changes to the education inspection framework

April 2019

FRAMEWORK PROPOSALS

Proposal 1

We propose the introduction of a new 'quality of education' judgement built around our working definition of the curriculum. It will focus on a provider's educational intent, implementation and impact. Inspectors look at teaching, assessment, attainment and progress under the current inspection framework, and they will continue to do so, but these considerations will contribute, viewed in the context of the provider's curriculum, to a single quality of education judgement. In short, we propose to take a holistic approach to considering the quality of education rather than artificially separating the leadership of the curriculum from teaching, and separating teaching and the use of assessment from the impact this has on the outcomes that learners achieve. This will de-intensify the inspection focus on performance data and place more emphasis on the substance of education and what matters most to learners and practitioners.

To what extent do you agree or disagree with the proposal to introduce a 'quality of education' judgement?

Strongly Agree / Agree / Neither agree or disagree / Disagree / Strongly disagree / Don't know

- The Royal Society of Biology (RSB) welcomes Ofsted's strong emphasis on the curriculum and shift away from performance data. We support measures to take a holistic approach to considering the quality of education, and focus on providers' educational intent, implementation and impact. All students should have access to a broad and balanced curriculum that supports the understanding of subject knowledge and development of a range of skills.
- The Society is considering the importance of a coherent biology education, with the objective of developing a long-term view of what the school biology curriculum will look like. We are working with the bioscience and education communities to develop an informed position for a framework for a coherent 5-19 biology curriculum.¹ The Society aims to ensure that students, at all educational stages and through all qualification routes, engage with a biology curriculum that is coherent and prepares them for their next steps in life.
- The RSB is continuing to engage with stakeholders, including policy makers and curriculum developers, on our 5-19 biology curriculum framework. A suite of documents on a framework for the biology curriculum will be published in 2020, but this stakeholder engagement will continue up to and during future curriculum reviews. We believe that our 5-19 biology curriculum framework will support the intent and implication criteria within Ofsted's inspection framework, by providing school leaders with a coherent framework for curriculum development, that enables progression and ensures students are ready for the next stage of education, employment or training.
- For the implementation of the quality of education to be effective, teachers should have both disciplinary expertise in their subject and the opportunity to develop this expertise. There must be a greater focus on professional development across the school system as a whole and a collaborative approach by staff to developing pupils' understanding across the curriculum. Time for continuing professional development (CPD)

¹ Developing a framework for the biology curriculum, SSR (September 2018)

https://www.rsb.org.uk/images/SSR_September_2018_23-29_McLeod.pdf

Charles Darwin House, 12 Roger Street, London WC1N 2JU Tel: +44 (0)20 7685 2550 info@rsb.org.uk
www.rsb.org.uk

and mentoring must be allocated during timetabled hours to ensure teachers are not overburdened with marking and planning activities.

- For the leadership and management of a school to be judged 'outstanding' under the new inspection framework, leaders must ensure that teachers receive focused and highly effective professional development. The Society supports the inclusion of this criterion, however, there should be greater emphasis on subject-specific CPD. Teachers must have access to high quality subject-specific CPD, particularly opportunities to participate in offsite CPD which can enable science teachers to re-engage with their subject and fellow professionals. Clear evidence of subject-specific CPD should be included as a prerequisite of an 'outstanding' judgement by Ofsted.
- Subject-specific professional development, including for teachers working outside their subject area, is particularly important in the sciences. Subject-specific CPD not only increases teachers' subject knowledge and pedagogical skills, but has been shown to improve teacher retention.² Many science teachers are required to teach outside their subject and early career teachers are more likely to leave the profession because of this.

Proposal 2

We propose to judge 'personal development' separately from 'behaviour and attitudes' to enhance the inspection focus on each and enable clearer reporting on both. This approach recognises the very different elements in focus. We believe that the behaviour and the attitudes learners of all ages bring to learning is best evaluated and judged separately from the provision made to promote learners' wider personal development, character and resilience.

To what extent do you agree or disagree with the proposed separation of inspection judgements about learners' personal development and learners' behaviour and attitudes?

Strongly Agree / **Agree** / Neither agree or disagree / Disagree / Strongly disagree / Don't know

- In principle, we agree with the proposed separation and support the use of evidence from Ofsted research.³ However, Ofsted's research predominantly focuses on correlations, for example, between the school environment and pupil wellbeing, with little reference to causality. The research places emphasis on some children being more resilient than others, implying an inherent trait. However, there is insufficient research knowledge on how to change someone's resilience or 'grit,' or how schools will try to measure and develop student resilience.

MAINTAINED SCHOOLS AND ACADEMIES

Proposal 4

Since their introduction in 2015, section 8 inspections of good and non-exempt outstanding schools have been valued by the sector. The changes made to the operation of these inspections from January 2018 have been welcomed by most schools inspected since then. The purpose of a section 8 inspection of a good school is to confirm that a school remains good. This will not change. However, as we have stated previously, the new education inspection framework represents an evolution in what it means to be a 'good' school.

We have set out within the schools handbook (paragraphs 270-282) the fact that a section 8 inspection of a good school will focus on particular aspects of the school's provision, as a subset of the full education inspection framework criteria. These are drawn principally from the quality of education judgement, but also include specific elements of pupils' behaviour, personal development and safeguarding.

² Increasing the quantity and quality of science teachers in schools: eight evidence-based principles, Sam Sims (February 2019) <https://www.gatsby.org.uk/uploads/education/increasingscienceteachers-web.pdf>

Currently, section 8 inspections of good schools (or 'short inspections') last for one day. We want to ensure that there is opportunity to gather sufficient evidence while on inspection to confirm that a school remains good under the new criteria. Therefore, we are proposing to increase the time for which the lead inspector is on site to two days.

To what extent do you agree or disagree with the proposed focus of section 8 inspections of good schools and non-exempt outstanding schools and the proposal to increase the length of these inspections from the current one day to two days?

Strongly Agree / Agree / Neither agree or disagree / Disagree / Strongly disagree / Don't know

- An extension to the current inspection length is likely to allow further identification of good practice in the provider's educational intent, implementation and impact. Two-day inspections are likely to enable inspectors to gain a greater depth understanding of the breadth of the curriculum being taught. If inspectors want to identify good practice at subject level, periodic focus on subjects could be implemented.
- The Society would like to see greater emphasis on students' ability to carry out practical work in the sciences, and in biology field work in particular. Practical activities enable students to apply and extend their knowledge and understanding of science, and can give students an understanding of how scientific knowledge is developed through observation and experiment.
- We recommend that inspectors look for evidence that teachers are delivering high quality practical work in the sciences, and that there is a strong commitment from the school's senior leadership team to support teachers in delivering high quality practical science teaching. For example, through appropriate timetabling, budgeting and technician support to ensure good and safe practice. The Gatsby Good Practical Science Benchmarks⁴ provide a framework for good practical science in schools, outlining recommendations to help secondary schools achieve world-class science education. The report highlights that just over a third of schools reach no full benchmarks at all. The report identifies 10 benchmark for effective practical science education.

Proposal 5

In addition to the wider education inspection framework proposals we are introducing, we also propose a new approach to how our inspectors prepare for and begin inspections. This is in response to feedback that initial contact can be data-driven and not allow schools to communicate fully with inspectors.

We propose the introduction of on-site inspector preparation for all inspections carried out under section 5 and section 8 of the Education Act 2005. Currently, inspectors carry out pre-inspection preparation remotely on the day prior to on-site inspection. We propose that, from September 2019, this preparation takes place at the school on the afternoon before the inspection, enabling inspectors and leaders to carry out preparation collaboratively wherever possible. On-site preparation will allow for better communication between the lead inspector and the school, allowing the school a clear role in preparation work. It will help to reduce the burden on schools of making logistical arrangements on the morning of the inspection and providing documentation. It will provide more time to establish good, professional relationships between school leaders and the lead inspector.

We propose that Ofsted will provide formal notification of the inspection no later than 10am on the day before the inspection. We then propose that the lead inspector will arrive on site no earlier than 12.30pm on that day. The lead inspector will use this time to talk with senior leaders in order to gain an overview of the school's recent performance and any changes since the last inspection.

⁴ Good Practical Science report, Gatsby Charitable Foundation (September 2017)
<http://www.gatsby.org.uk/uploads/education/reports/pdf/good-practical-science-report.pdf>

Conversations will focus particularly on how the school has built on its strengths, what weaknesses leaders have identified and what action they have planned or have in train to address those weaknesses. It will also be an opportunity to make practical arrangements, including about the documentation or other evidence that inspectors will need to see in the course of the inspection. Inspectors will complete their on-site inspection preparation and leave the school premises by no later than 5pm on the day before the inspection starts. Paragraphs 51 - 56 of the school inspection handbook set out in more detail what we expect on-site preparation to cover.

To what extent do you agree or disagree with the proposed introduction of on-site preparation for all section 5 inspections, and for section 8 inspections of good schools, on the afternoon prior to the inspection?

Strongly Agree / Agree / Neither agree or disagree / Disagree / Strongly disagree / Don't know

- The Society agrees with the proposed new approach to how Ofsted inspectors prepare for inspections, so that some of the burden on schools for providing documentation is alleviated.
- The move towards quality of education is a welcome opportunity to support a greater emphasis on developing pupils' understanding of disciplines and how they interact across the curriculum as well as within individual subjects.

Proposal 6

The recent Teacher Workload Advisory Group report⁵ noted that 'time associated with data collection and analysis... is most frequently cited as the most wasteful due to a lack of clarity amongst teachers as to its purpose'.

Ofsted is committed to ensuring that our inspection work does not create unnecessary work for teachers, and as such we propose that inspectors will not use schools' internal performance data for current pupils as evidence during an inspection. This is because:

- internal data for current pupils has its limitations, and inspectors will not be able to assess whether the data is an accurate and valid representation of pupils' learning of the curriculum
- inspectors will gather direct evidence of the quality of education in schools
- inspectors will have meaningful discussions with leaders about how they know that the curriculum is having an impact.

Inspectors will, however, ask schools to explain why they have decided to collect whatever assessment information they collect, what they are drawing from this information and how that informs their curriculum and teaching. We believe that this will help to reduce unnecessary workload for teachers; we do not believe that it will have a negative effect on our ability to judge effectively the quality of education in a school.

To what extent do you agree or disagree with the proposed introduction of on-site preparation for all section 5 inspections, and for section 8 inspections of good schools, on the afternoon prior to the inspection?

Strongly Agree / Agree / Neither agree or disagree / Disagree / Strongly disagree / Don't know

- The Society agrees with the proposed new approach to how Ofsted inspectors prepare for and begin inspections, so that some of the burden on schools for providing documentation is alleviated and there is a greater focus on the impact of the curriculum as a whole.

⁵ 'Making data work: report of the Teacher Workload Advisory Group', Teacher Workload Advisory Group, 2018; www.gov.uk/government/publications/teacher-workload-advisory-group-report-and-government-response

Please use this box to record any additional comments in relation to the detail set out in the draft school inspection handbook.

- All learners should study a broad and balanced curriculum with distinct scientific disciplines. To ensure that all providers teach a full range of subjects, and in accordance with the Ofsted inspection framework “‘specialising’ only when necessary”, all three sciences should be taught at Key Stage 4. The sciences, along with English and mathematics are core subjects, and therefore compulsory for students; however, there are currently multiple routes for students through the sciences at Key Stage 4.
- The Association for Science Education, Institute of Physics, Royal Society, Royal Society of Biology and Royal Society of Chemistry jointly commissioned research by Shift Learning, to understand the variety of timetable models used by schools to teach the sciences at Key Stage 4.⁶ The research has identified a wide range of GCSE science timetable models used by schools across England. Preliminary analysis of the findings shows that there are a large number of schools that are using models which can be deemed problematic, for example, models with teaching from teachers without specific subject expertise or time pressures for students to learn more content without additional time allowance. The majority of schools surveyed teach GCSE sciences across 3 years, whereas optional GCSEs are commonly taught across 2 years, effectively narrowing the curriculum in the sciences at Key Stage 3 to squeeze in extra teaching time at Key Stage 4.
- To ensure that “the provider has the same academic, technical or vocational ambitions for almost all learners,” students must have equitable access to the sciences. We believe this can best be achieved by the creation of a single route at Key Stage 4. This single route would remove the need for decisions to be made at 14 that can limit students’ future choices, and would give all students an authentic, exciting and inspiring experience of the sciences. Initial findings from our timetabling research suggest that regardless of the science qualification routes offered, i.e. combined science only, triple science only or both, students are disadvantaged. Triple science classes are often timetabled on less than a proportional increase of timetabled lessons, and combined science classes are less likely to be allocated three teachers with individual disciplinary expertise.
- As part of this commissioned research, time and teacher allocation variables were determined from quantitative survey answers. Ongoing work from this data set includes production of a mechanism for schools to identify their own model, helping them to interpret the consequences of timetabling decisions and teacher deployment. In the coming weeks the organisations will publish the research and would be happy to engage further with Ofsted on the initial findings from this report, policy implications and recommendations for teachers and schools leaders on narrowing of the curriculum at Key Stage 3, deployment of teachers and equity of routes for all students.
- Our concerns around timetabling of the sciences, and achieving a broad and balanced curriculum, extend to primary education. Primary science is a core subject within the National Curriculum, but provisions for primary science are typically weaker than those for English and mathematics. In a recent Ofsted curriculum research report⁷ which looked at the science offers in primary schools, inspectors found that science had weaknesses in the curriculum design that were not present in English or mathematics. Inspectors identified “surface-level compliance” with the National Curriculum, with schools often struggling to build a meaningful curriculum and, as a result very little science content witnessed. Evidence for this ‘deprioritising of science’ also comes from the Wellcome Trust’s research in the ‘State of the nation’ report of UK primary science education, which found

⁶ <http://blogs.royalsociety.org/in-verba/2019/02/11/the-complexities-of-timetabling-science-lessons-in-secondary-schools/>

⁷ Intention and substance: further findings on primary school science from phase 3 of Ofsted’s curriculum research, Ofsted (February 2019)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/777992/Intention_and_substance_findings_paper_on_primary_school_science_110219.pdf

that only 42% of UK primary schools teach science for two or more hours a week.⁸ The report identified two main barriers to the teaching of primary science – a lack of time and a shortage of resources to deliver science.

- It is crucial that future inspections under the new Ofsted framework report on science, and the focus on ‘quality of education’ is not limited to a narrow range of subjects in the curriculum. As recommended in the Wellcome Trust’s review of Ofsted inspection reports,⁹ all primary inspection reports should comment on science. Ofsted’s review of science within schools should be guided by the recommendations in their Maintaining Curiosity report¹⁰ including:
 - Sufficient weekly curriculum time
 - Subject-specific continuing professional development for subject leaders and teachers that improves the quality of assessment and feedback for pupils in science
 - Regular monitoring of pupils’ progress in science to ensure they are supported effectively to reach their potential
- It is not clear from the Ofsted draft school inspection handbook if inspectors will have any subject specific expertise. In order to measure the quality of education in a holistic approach, and the full intent, implementation and impact of the curriculum, Ofsted should undertake more subject specific inspections. Such inspections should ideally be undertaken by an inspector with relevant subject expertise.
- With each new iteration of education inspections, schools and teachers must spend time focusing on preparations for the new methods of inspection. A period of stability is needed, after the introduction of the new Ofsted education inspection framework, to allow time for schools to adapt to these changes.
- The Society welcomes the inclusion of teacher workload in the leadership and management judgement, which states leaders ‘take into account the workload and well-being of their staff in order to deliver a high-quality education, while also developing and strengthening the quality of the workforce.’ School leaders should be aware of the workload of their staff, as well as taking an active role in reducing workload, particularly around Ofsted inspections. Workload and accountability pressures are two of the most frequently cited reasons for teachers leaving the profession.¹¹ While the government and Ofsted have made steps to address this challenge, it is crucial that school leaders monitor staff workload and take appropriate action to reduce this issue.

FURTHER EDUCATION AND SKILLS

Proposal 9

We believe that it would make our inspections and reports more coherent and inclusive if we were to reduce the types of provision that we grade and specifically report on as follows:

⁸ ‘State of the nation’ report of UK primary science education (September 2017)

The Wellcome Trust recommends a minimum of two hours of primary science teaching a week (the international weekly average for primary science teaching in similar nations) so that all pupils can experience a broad and engaging science curriculum.

<https://wellcome.ac.uk/sites/default/files/state-of-the-nation-report-of-uk-science-education.pdf>

⁹ A review of Ofsted inspection reports: science, Wellcome Trust (December 2016) <https://wellcome.ac.uk/sites/default/files/review-of-ofsted-inspection-reports-wellcome-dec16.pdf>

¹⁰ Maintaining curiosity: a survey into science education in schools, Ofsted (November 2013)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/379164/Maintaining_20curiosity_20a_20survey_20into_20science_20education_20in_20schools.pdf

¹¹ Teacher recruitment and retention in England, David Foster, House of Commons Library (June 2018)

<https://dera.ioe.ac.uk/31729/1/CBP-7222..pdf>

We will cover education and training for people with SEND and/or high needs thoroughly and appropriately within the relevant type of provision rather than separately. We consider that this will ensure that they are fully and properly represented and not marginalised or isolated within the inspection and report.

T-levels, a major reform of technical education at level 3, will be introduced from September 2020. That will take place after the beginning of this new framework. We intend to review how we should best integrate the coverage of T-levels into this framework closer to the time of their introduction and will consult further on this in due course.

To what extent do you agree or disagree that the proposal to reduce the types of provision we grade and specifically report on will make our inspection reports more coherent and inclusive?

Strongly Agree / **Agree** / Neither agree or disagree / Disagree / Strongly disagree / Don't know

- The Society welcome Ofsted's proposal to make their inspections of further education providers and reports more coherent and inclusive, by reducing the types of provisions graded and reported on.
- Although T levels will operate in a different learning environment to A levels, it is important to consider how these new qualifications will fit into the Ofsted framework, to help ensure parity of esteem between academic and technical education routes. We welcome the suggestion of a future consultation on the proposed review into how T levels should best be integrated into the framework.