

Evolving

5-19

Biology



summary for
teachers



Royal Society of
Biology

What is the purpose of this **summary document?**

This summary document is an introduction of the Royal Society of Biology's **5-19 biology curriculum framework** for teachers and biology curriculum leaders.

Why has the Royal Society of Biology (RSB) developed a curriculum framework?

We know that the curriculum is the basis upon which the learning experiences of our students are built. As such, the curriculum is of relevance to everyone in education from our students, us as their teachers and school curriculum leaders all the way to awarding organisations, regulatory bodies and policymakers. We also know that biology is an essential subject for study at school, and beyond. It helps young people to face the challenges of personal and public health, ethical and legal issues relating to biology based research and the concern for the current environmental crisis and understanding the world around them, amongst many other things.

We are also aware that educational change happens, sometimes relatively frequently. With this at the front of our minds, the Royal Society of Biology's Education Committee has written a biology curriculum framework to provide a scaffold for all future curricula design to be based upon. For the first time, we now have a coherent progression through biology knowledge content and practical skills development between ages 5 and 19, that allows clear links to be made between areas within biology across this entire age range.

This process began in 2014 with the involvement of a range of experts including: assessment and curriculum development specialists, bioscience higher education representatives, education researchers, initial teacher training representatives, primary teachers, secondary teachers, students and representatives from industry. This range of experience has ensured we have written this with learners at all ages of schooling in mind, crucially focussing upon the transition phases within this, yet also preparing students at schools for further study.

Who is this framework for?

We began writing this document with policymakers in mind. We wanted to be able to present this document when consulted upon future curricula. However, the wider application or use of our framework quickly became apparent. We hope it will support:

- (a) teachers at the beginnings of their careers to make links between topics
- (b) teachers interested in enriching their current practice by looking at progression between key stages within or between schools
- (c) teachers and curriculum leaders developing and justifying the biology curriculum within their schools
- (d) curricula leaders reviewing their current provision against further curricula reform.
- (e) trainee teachers.

The framework is designed with an inherent flexibility in mind to allow iterative changes, without altering its key intent. We hope it will help ‘uncover’ the inherent awe and wonder in our subject, and not just ‘cover’ content and skills. Like biology itself, documents linked to the overarching framework will develop over the coming years, supporting an approach of “evolution not revolution” in UK curricula.

What is the Royal Society of Biology (RSB) proposing?

The curriculum framework involves three key dimensions: Biology as a science, Core concepts of biology, and Biology in the world. Within these dimensions are seven big questions. We have chosen questions rather than topics to mean these are directly relevant at all ages, and they allow development within them. Within these are 23 themes with detailed exemplification. Many of these run from age 5 to 19, whilst others begin at appropriate points. These themes contain the considered biological knowledge and practical skills development required to ensure all young people who finish school are able to go on to further study and/or become active and informed citizens.

We hope that you will enjoy and engage with our curricula framework, and that you find it a useful document both now and in the future.