

Briefing for the Public Petitions Committee

Petition Number: [PE1764](#)

Main Petitioner: James Robertson on behalf of Families in Support of Evolutionary Studies

Subject: Include evolutionary studies within the primary school curriculum

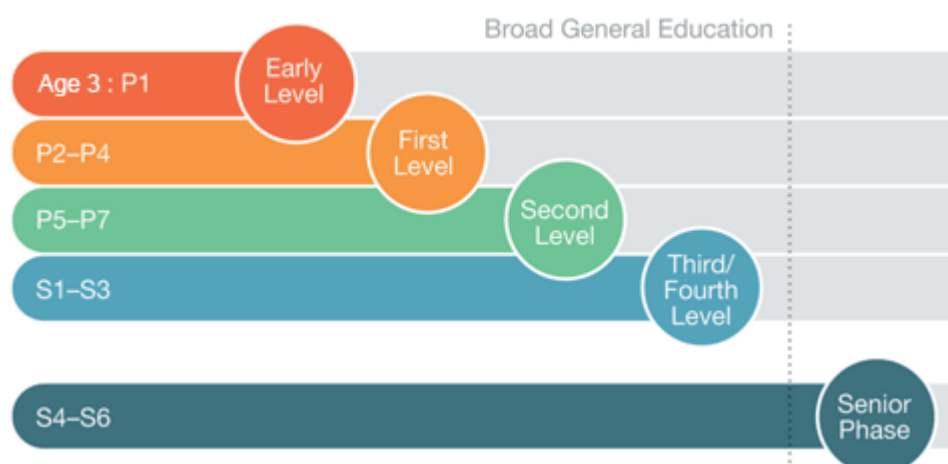
Calls on the Parliament to urge the Scottish Government to add evolutionary studies to the primary school curriculum.

Background

Very little of the school curriculum is statutory in Scotland. The non-statutory Curriculum for Excellence (“CfE”) is intended to be an outcomes-based approach whereby education authorities and schools have a great deal of autonomy on what is taught and how. This is supported by guidance produced by Education Scotland.

CfE is organised into a number of specific curriculum areas and three areas that are the responsibility of all practitioners: health and wellbeing, literacy, and numeracy. Two curriculum areas of relevance to this petition are ‘Religious and moral education’ and ‘Sciences’.

CfE is also organised by levels. Within Broad General Education – from early years to the end of S3 – there are five levels. The diagram below shows how these might be expected to map on to different years of schooling. It is important to note that the diagram is illustrative, and learners will progress at their own pace through the curriculum levels.



Within the curriculum areas are listed Experiences and Outcomes (sometimes referred to as “Es and Os”) and Benchmarks. Experiences and Outcomes are statements about children's learning and progression and Benchmarks are intended to set out national standards expected within each curriculum area at each level.

Religious and moral education

Religious instruction and observance have a statutory position within Scottish education under sections 8 and 9 of the Education (Scotland) Act 1980. The drafting of the 1980 Act is not straightforward. Section 8 provides that, where it has been the custom for schools to have religious instruction and observance, an education authority may not discontinue this without such a proposal having been confirmed by a local referendum.

Section 9 of the 1980 Act is titled *Conscience clause* and provides that “any pupil may be withdrawn by his parents from any instruction in religious subjects and from any religious observance in any [public or grant aided] school”. Section 9 continues to state that as a result of doing so no pupil “shall in any such school be placed at any disadvantage with respect to the secular instruction”.

The extent to which Religious and Moral Education (“RME”) includes the statutory element of religious instruction (or covers broader approaches to morality) is likely to vary from school to school. The Experiences and Outcomes in RME differ for non-denominational schools and Roman Catholic Schools.

Sciences

The teaching of sciences is not specifically set out in legislation. However, parents have a duty to provide “efficient education” by, for example, sending the child to school (s31 1980 Act). Furthermore, an education authority must secure “adequate and efficient education” in its area (s1 1980 Act).

In CfE, one of the headings under which Experiences and Outcomes in Sciences are organised is Biological systems, which has a sub-heading of Inheritance. The following are two Experiences and Outcomes under this sub-heading:

“By comparing generations of families of humans, plants and animals, I can begin to understand how characteristics are inherited.” First Level, SCN 1-14a

“By exploring the characteristics offspring inherit when living things reproduce, I can distinguish between inherited and non-inherited characteristics.” Second Level, SCN 2-14b

The following Benchmarks are relevant to these Experiences and Outcomes:

“Knows that genetic information determines characteristics such as colour of eyes and shape of petals.” SCN 1-14a

“Knows that genetics is the study of inherited characteristics and that inherited characteristics are carried on genes and can sometime skip a generation.” SCN 2-14b

The following Experience and Outcome comes under the Biodiversity and Interdependence heading:

“I can identify and classify examples of living things, past and present, to help me appreciate their diversity. I can relate physical and behavioural characteristics to their survival or extinction.” Second Level SCN 2-01a

The relevant Benchmarks for this Experience and Outcome include:

“Begins to construct and use simple branched keys which can be used to identify particular plants or animals.

“Identifies characteristics of living things and their environment which have contributed to the survival or extinction of a species.

“Describes how some plants and animals have adapted to their environment, for example, for drought or by using flight.”

Scottish Parliament and Scottish Government Actions

Concerns over the teaching of creationism in schools are periodically raised in the Scottish Parliament. For example, the following question was asked in 2013—

[Question S4W-17514: Patrick Harvie, Glasgow, Scottish Green Party, Date Lodged: 30/09/2013](#)

To ask the Scottish Government what measures are in place to prevent the teaching of creationism in Scotland's schools.

Answered by Alasdair Allan (29/10/2013):

Evolution is specifically covered in the experiences and outcomes for the sciences that form a core element of the Curriculum for Excellence.

It is of course for teachers, schools and local authorities to determine how best to deliver learning and teaching on any topic and subject in line with the Curriculum for Excellence and we expect teachers to use their professional judgement, experience and understanding of their pupils to respond sensitively to complex and challenging issues, such as those posed by the existence of differing belief systems.

There are support materials on how best to achieve this, including how best to teach evolution, and these are available to all teachers via the Education Scotland website.

A previous petition, [PE1530](#), lodged in 2014, called for “official guidance to bar the presentation in Scottish publicly funded schools of separate creation and of

Young Earth doctrines as viable alternatives to the established science of evolution, common descent, and deep time.”

SPICe was unable to find any references to the teaching of this particular aspect of biology being considered problematic. There have been concerns raised about the STEM (science, technology engineering and maths) subjects more broadly. For example, the Scottish Government supported the Science, Technology, Engineering and Mathematics Education Committee, whose [final report in 2016](#) concluded—

“Scottish STEM education stands on a strong base and has much to be proud of, but it needs further support and development.”

The Education and Skills Committee recently concluded an inquiry into STEM education for 3 to 7 year-olds in childcare and school education. At the time of writing the Committee’s report had not been published.

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13 November 2019

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