



A comparison of the Core Primary Curriculum in England to those of Other High Performing Countries

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Countries selected

The final selection of countries and subjects for comparison was:

Science	Mathematics	Literacy
Singapore	Singapore	Singapore
Chinese Taipei	Chinese Taipei	Chinese Taipei
Hong Kong	Hong Kong	
	Netherlands	Netherlands
Latvia	Latvia	Latvia
Ontario	Ontario	Ontario
		British Columbia
		Italy
		Sweden

Objectives

The objectives of the study were to establish how the England curriculum for key stage 2 mathematics, science and literacy compared with those of countries showing a high level of performance in international comparative surveys of performance.

In particular attention was paid to:

- The overall structure of the curricula;
- The relative breadth of the curricula;
- The relative difficulty of the curricula;
- How the difficulty of what is taught is matched to the ability of the pupil;
- Prescription of such features as time allocated to a subject, order of teaching topics,
- Specifics of how the curriculum is implemented.

Key Findings: Mathematics

- The structure of our mathematics curriculum, by content, is similar to most of the others in comparator countries.
- The basic division into number, geometry and data handling is common amongst the curricula.
- The emphasis on process is shared by most of the other curricula.
- England's curriculum for number is judged to be narrower and less demanding than the majority of the other curricula.
- In data handling, by contrast, the curriculum in England is broader and more demanding than those elsewhere.
- In geometry the emphasis in England on visualization and transformational geometry is not shared by the other countries.

Key Findings:

Science

- The structure of our science curriculum, Scientific enquiry and then divided by content, is just one of a variety of structures seen in the comparator countries. Thematic structuring is one of the alternatives found.
- The basic division of content into biology, chemistry and physics (with other nomenclature) was not widely shared, with several curricula breaking content down into more discrete areas.
- The emphasis on scientific enquiry is shared by all of the other curricula, but not all have it as a structural element.

Key Findings: Science

- England's curriculum for Physical processes is judged to be narrower and less demanding than the majority of the other curricula.
- England's curriculum for Life processes and living things is judged to be narrower than those elsewhere, but not always less demanding.
- For both Scientific enquiry and Materials and their properties the tendency is for the level of demand to be similar to most of the other curricula.

Key Findings:

Literacy

- The structure of our literacy curriculum by language mode – speaking and listening, reading, writing – is not replicated exactly in any of the comparator countries, though some have similar categories. Structuring by purposes/uses of literacy is one of the alternatives found.
- The literacy curricula in the comparator countries are much more likely to include an elaboration of their underlying philosophy and rationale than England, where this is extremely brief.
- Some of the comparator literacy curricula are expressed in general terms which make it difficult to compare difficulty and breadth reliably. Others break down the skills and understandings into specific objectives in a similar way to England.

Key Findings:

Literacy (cont.)

- In reading, the requirement for an analytic approach to the study of texts in England is judged more demanding than the full comprehension of texts found in other curricula.
- No other overall patterns could be detected, given the differences of approach across countries. Broadly, the coverage of England's literacy curriculum appears similar to that in the other curricula.

Key Findings: Differentiation

Accommodating A Wide Spread of Ability

- Only one country, Singapore, was found to have a system with differentiation built in. This takes the form of streaming.
- The other systems regard it as the role of the teacher to deal with pupils of different ability. Practice in England is similar to all of the other countries studied except for Singapore.

Implementation



- For teaching mathematics around 3 hours per week was the most common time allocation.
- Science allocations were lower than for mathematics, substantially so in some countries.
- Literacy allocations tended to be higher than those for mathematics, but this was sometimes because pupils were not being taught in their native languages.
- No consistency was found in whether the time allocated to subjects increased with time, stayed the same or decreased.
- None of the curricula examined were accompanied by mandatory instructions on how mathematics, science or literacy were to be taught. England is not unusual in this respect.

How was it done?



- Comparison made twice, once at NFER and once in the comparator country
- Excel spreadsheets with programme of study for England

Judgments



Breadth:	Broader, similar or narrower
Difficulty:	More demanding, similar in demand or less demanding
Confidence:	Very confident, quite confident or not confident

Example

English National Curriculum Programme of Study	English National Curriculum Reference Number	Comparison country Programme of Study nearest equivalent	Is comparison country easier (E) or harder (H) or similar (S)	How sure are we about the difficulty comparison?	Is the comparison country curriculum narrower or broader?	How sure are we about the breadth and depth comparison?
to recognise differences between solids, liquids and gases, in terms of ease of flow and maintenance of shape and volume.	3/1e	groups the substances according to their aggregate state (solid, liquid, gasiform)	Similar	Very confident	Similar	Very confident



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