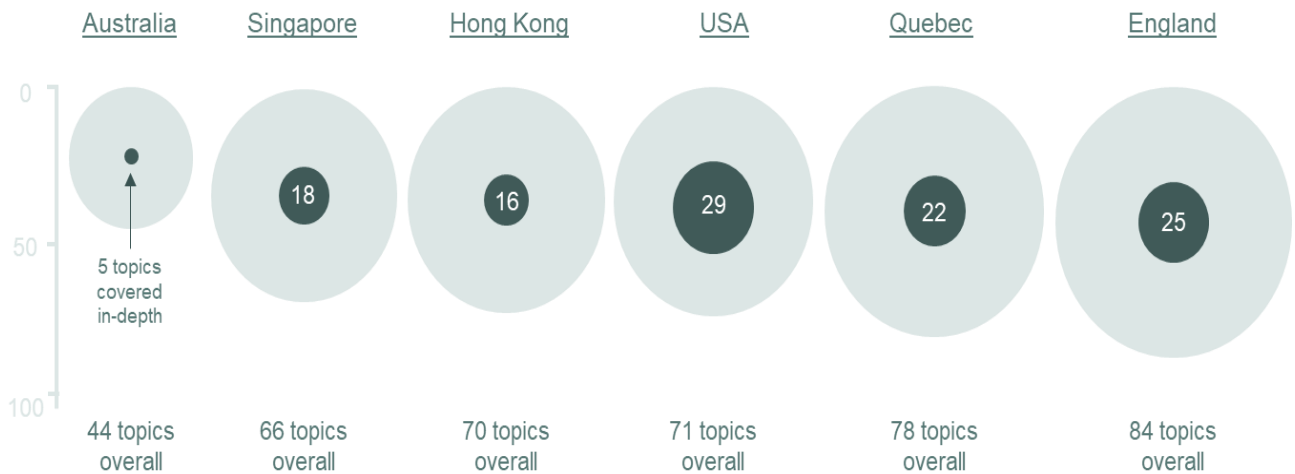


In the first nine years of schooling the Australian science curriculum covers just five topics in depth compared with an average of 22 in other systems.

### Total number of topics and the number of topics covered in depth



A topic that is covered in depth in multiple systems but not in Australia is 'magnets and magnetism'. Below is what it looks like in the science curriculums in Australia and England.

#### Australia

##### Year 4

- Identify how forces can be exerted by one object on another and investigate the effect of frictional, gravitational and magnetic forces on the motion of objects

#### England

##### Year 3

- Notice that some forces need contact between two objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials.
- Describe magnets as having two poles.
- Predict whether two magnets will attract or repel each other, depending on which poles are facing.

##### Year 7-9

##### Magnetism

- Magnetic poles, attraction and repulsion
- Magnetic fields by plotting with compass, representation by field lines
- Earth's magnetism, compass and navigation
- The magnetic effect of a current, electromagnets, D.C. motors (principles only).

##### Forces

- Non-contact forces: gravity forces acting at a distance on Earth and in space, forces between magnets and forces due to static electricity.