

## Does Australia have a World-Class Education System? Evidence from PISA 2006

### What Does PISA Test?

PISA 2006 assessed Scientific Literacy as the major domain. In other words, a more comprehensive assessment of students' scientific literacy skills was undertaken in 2006 than in PISA 2000 or PISA 2003, when the major domains were Reading Literacy and Mathematical Literacy, respectively. All three domains are assessed in each PISA cycle.

In 2006, PISA assessed the aspects of Scientific Literacy shown in the following table. Students' performances are reported in each of these areas.

#### *Competencies in Science*

PISA assessed three broad scientific competencies:

- identifying scientific issues
- explaining phenomena scientifically
- using scientific evidence

#### *Knowledge of Science*

PISA assessed students' abilities to apply knowledge from four content areas:

- physical systems
- living systems
- Earth and space systems
- technology systems

#### *Knowledge about Science*

PISA assessed students' knowledge about science as a human endeavour:

- scientific enquiry
- scientific explanations

#### *Attitudes*

PISA assessed students' attitudes, beliefs, motivational orientations, self-efficacy and values:

- interest in science
- support for scientific enquiry
- responsibility towards resources and environments