

## EDUCATION, SCIENCE AND TRAINING

### SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2003-2004 SUPPLEMENTARY BUDGET ESTIMATES HEARING

**Outcome:** ALL  
**Output Group:** ALL

#### DEST Question No. E446\_04

Senator Carr asked on 5 November 2003, EWRE Hansard page 71.

#### Question:

The [interim] report [on *Mapping Australian Science and Innovation*] concludes “there are signs that our human capital in the enabling sciences and engineering is at risk”. What specific indicators of decline in our human capital were discussed by the taskforce?

#### Answer:

##### *Mapping Australian Science and Innovation*

The mapping report finds that Australia has a broad human capital base to underpin science and innovation, including a qualified workforce and a population with positive attitudes to science and a willingness to take up new technologies. It also finds that the long-term sustainability of Australia’s enabling skills base is under pressure in some areas. This finding drew on a number of indicators outlined in Section 3.2 of the main report including:

- declines in the proportion of Year 12 students enrolled in physical sciences over the period 1991 to 2000, including a decline in the proportion undertaking two physical science subjects, which is a common pathway to science, engineering or health undergraduate studies at tertiary level;
- declining award course completions in science and technology subjects at undergraduate tertiary level, including in mathematics, engineering and physical sciences; and
- a declining proportion of Bachelor of Education and Diploma of Education students taking mathematics and science subjects, leading to an anticipated shortage of mathematics, science and ICT teachers in schools.