

**SENATE STANDING COMMITTEE ON
EDUCATION, EMPLOYMENT AND WORKPLACE RELATIONS**

**QUESTIONS ON NOTICE
SUPPLEMENTARY ESTIMATES 2009-10**

Outcome 2
DEEWR Question No. EW713_10

Senator Mason asked on Thursday, 22 October 2009, EEWL Hansard page 45

Question

Building the Education Revolution

Senator Mason quoting from the BER guidelines at page 2 – Through the BER, the Commonwealth aims to:

1. Provide economic stimulus through the rapid construction and refurbishment of school infrastructure.
2. Build learning environments to help children, families and communities participate in activities that will support achievement, develop learning potential and bring communities together.

On what basis is the claim made that erecting a new building at a school will help school children to support achievement and develop learning potential?

Senator Mason—can I just ask the specific question—that is, the cost-benefit analysis of providing schools with new buildings versus other ways of improving educational outcomes.

Ms Paul—I am not sure whether the research goes to cost benefit. We might take that on notice for you but we are aware of some research.

Senator Mason—that is the critical issue, Ms Paul—cost benefits, the best-spend issue.

Ms Paul—we can take that on notice but there certainly is some international research which we can run over for you now.

Answer

In 2001, the former Commonwealth Department of Education, Training and Youth Affairs in consideration of existing qualitative and quantitative research material on the impact of school infrastructure on student outcomes and behaviors, found that the research indicates:

- student academic achievement improves with improved building condition;
- individual factors, such as lighting levels, air quality and temperature and acoustics, have an effect on student behaviour and outcomes; and
- capital expenditure, directly linked to the teaching of the curriculum, was found to have the strongest benefits for student performance.

This paper is available at www.dest.gov.au/NR/rdonlyres/69728B50-143A-4C9A-BD91-3703FC7A80DC/4507/building.pdf.

International studies typically find that better school facilities contribute to higher student outcomes and fewer behavioral problems.

Examples of such studies include:

- The key quantitative findings in research undertaken in the United Kingdom by Pricewaterhouse Coopers, *Building Better Performance: An Empirical Assessment of the Learning and Other Impacts of Schools Capital Investment* found a positive association between capital investment and teacher morale, pupil motivation and the quality of teaching all of which, in turn, were likely to have a significant impact on pupil performance.

The study found evidence that 'there is a positive and statistically significant association between capital investment and pupil performance'. This study is available at www.dcsf.gov.uk/research/data/uploadfiles/RR407.pdf.

- Research undertaken in the United States, found that the quality of school infrastructure has a significant effect on school attendance and drop-out rates, with students less likely to attend schools in need of structural repair, and those that use temporary structures, see <http://ideas.repec.org/a/bla/socsci/v85y2004i5p1112-1128.html>.
- Further research from the United States indicates that the condition of a building is related to academic achievement, and improvement in the condition of the building is associated with improvement in achievement scores, see www.umass.edu/architecture/news_events/pubs/fisette_2006_greenschools1.pdf.
- In the United States research also indicates that poor school facilities also negatively impact teacher effectiveness and performance, which in turn can directly influence student performance. The paper indicates that better school facilities also contribute to teacher retention, see <http://edfacilities.org/pubs/teacherretention.pdf>.